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Structure attributes must be viewed using STN Express query preparation.

L2 3428 SEA FILE=REGISTRY SSS FUL L1

L3 12 SEA FILE=CAPLUS L2 AND HYDRATE# AND CRYSTAL?

=> d l3 1-12 ibib abs hitstr

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:740315 CAPLUS

DOCUMENT NUMBER: 141:265972

TITLE: Preparation of crystal polymorphs of the

antiulcer agent S-omeprazole and its hydrates

INVENTOR(S): Kumar, Yatendra; Khanna, Mahavir Singh; Prasad, Mohan

PATENT ASSIGNEE(S): Ranbaxy Laboratories Limited, India

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

```
WO 2004-IB535
    WO 2004076440
                          A1
                                20040910
                                                                    20040301
            AE, AE, AG, AL, AL, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG,
             BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR,
             CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES,
             ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN,
             IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC,
             LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX,
             MZ, MZ, NA, NI
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
             BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
             MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA,
             GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA,
             GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                            IN 2003-DE199
                                                                A 20030228
GI
```

AB Polymorphic forms of the S-enantiomer of omeprazole, S-5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole (I), and its hydrates, are prepared and characterized.

IT 119141-88-7, S-Omeprazole 755036-61-4, S-Omeprazole sesquihydrate

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(preparation of **crystal** polymorphs of the antiulcer agent S-omeprazole and its **hydrates**)

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 755036-61-4 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, hydrate (2:3) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●3/2 H₂O

IT 161796-84-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of crystal polymorphs of the antiulcer agent

S-omeprazole and its hydrates)

RN 161796-84-5 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, potassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

K

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

5

ACCESSION NUMBER:

2004:550950 CAPLUS

DOCUMENT NUMBER:

141:111542

TITLE:

Solid states of pantoprazole sodium, processes for preparing them and processes for preparing known

pantoprazole sodium hydrates

INVENTOR (S):

Finkelstein, Nina; Wizel, Shlomit; Krochmel, Barnaba;

Braude, Viviana

PATENT ASSIGNEE(S):

Teva Pharmaceutical Industries Ltd., Israel; Teva

Pharmaceuticals USA, Inc.

SOURCE:

PCT Int. Appl., 90 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

. 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004056804	A2	20040708	WO 2003-US40668	20031219

WO 2004056804 20040805 Α3 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20040916 US 2004177804 **A1** US 2003-739272 20031219 PRIORITY APPLN. INFO.: US 2002-434445P P 20021219 US 2003-453836P P 20030312 Crystalline pantoprazole sodium forms II, IV, V, VI, VIII, IX, X, XI, XII, AB XIII, XIV, XV, XVI, XVIII, XVIII, XIX and XX, pantoprazole sodium solvates containing water, acetone, butanol, Me Et ketone, dimethylcarbonate, propanol and 2-methylpropanol, and amorphous pantoprazole sodium are disclosed. A method of treating gastroesophageal reflux disease comprising administering to a patient a pantoprazole sodium is claimed. IT **102625-70-7**, Pantoprazole RL: RCT (Reactant); RACT (Reactant or reagent) (of pantoprazole sodium and solvates thereof) 102625-70-7 CAPLUS RN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-CN

pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 164579-32-2 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt, hydrate (2:3) (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ \hline N & S - CH_2 \\ \hline N & MeO \end{array}$$

Na

●3/2 H₂O

RN 699002-47-6 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt, monohydrate (9CI) (CA INDEX NAME)

Na

● H20

RN 718635-00-8 CAPLUS

CN 2-Propanone, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 138786-67-1 CMF C16 H15 F2 N3 O4 S . Na

● Na

CM 2

CRN 67-64-1 CMF C3 H6 O

RN 718635-02-0 CAPLUS CN 1-Butanol, compd. wi

1-Butanol, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 102625-70-7 CMF C16 H15 F2 N3 O4 S

CM 2

CRN 71-36-3 CMF C4 H10 O

 $_{\rm H_3C^-CH_2^-CH_2^-CH_2^-OH}$

CM J

CRN 138786-67-1

CMF C16 H15 F2 N3 O4 S . Na

Na

CM 2

CRN 78-93-3 CMF C4 H8 O

RN 718635-06-4 CAPLUS

CN Carbonic acid, dimethyl ester, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 138786-67-1 CMF C16 H15 F2 N3 O4 S . Na

$$F_2CH-O N S-CH_2 NM OMe$$

Na

CM 2

CRN 616-38-6 CMF C3 H6 O3

RN 718635-07-5 CAPLUS

CN 1-Propanol, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 102625-70-7

CMF C16 H15 F2 N3 O4 S

CM 2

CRN 71-23-8

CMF C3 H8 O

 $H_3C-CH_2-CH_2-OH$

RN 718635-08-6 CAPLUS

CN 1-Propanol, 2-methyl-, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 102625-70-7

CMF C16 H15 F2 N3 O4 S

$$F_2CH-O$$
 N
 S
 S
 CH_2
 N
 N
 N
 N

CM 2

CRN 78-83-1 CMF C4 H10 O

RN 718635-09-7 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-

pyridinyl)methyl]sulfinyl]-, sodium salt, hydrate (9CI) (CA INDEX NAME)

Na

●x H₂O

CM 1

CRN 138786-67-1 CMF C16 H15 F2 N3 O4 S . Na

$$F_2CH-O$$
 N
 S
 S
 CH_2
 N
 N
 N
 N

Na

CM 2

CRN 78-93-3 CMF C4 H8 O

RN 718635-11-1 CAPLUS
CN 2-Propanone, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2 pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt, hydrate (9CI)
 (CA INDEX NAME)

CM 1

CRN 138786-67-1 CMF C16 H15 F2 N3 O4 S . Na

Na

CM 2

CRN 67-64-1 CMF C3 H6 O

RN 718635-12-2 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt, dihydrate (9CI) (CA INDEX NAME)

$$F_2CH-O$$
 N
 S
 S
 CH_2
 N
 N
 N
 N
 N

Na

●2 H₂O

RN 718635-13-3 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt, trihydrate (9CI) (CA INDEX NAME)

● Na

3 H₂O

ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:525965 CAPLUS

DOCUMENT NUMBER:

141:76745

TITLE:

Method for the preparation of coated drugs and dietary

supplements that include substances with a

concentration gradient in the coating

INVENTOR(S):

Petereit, Hans-Ulrich; Meier, Christian; Roth, Erna Roehm GmbH & Co. Kg, Germany

PATENT ASSIGNEE(S): SOURCE:

Ger. Offen., 14 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.						KIND DATE			APPL	ICAT		DATE				
DE	1026	A1 20040701			1	DE 2	002-	1026	0919		20021220						
WO	2004058225					A1 20040715			1	WO 2	003-1		20031018				
	W: AE, AG, AL,			AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,
		HR,	HU,	ID,	ΙL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	PG,
		PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,	TN,	TR,
		TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
PRIORITY	APP	LN.	INFO	.:					1	DE 2	002-	1026	0919	1	A 2	0021	220

AΒ The invention concerns the preparation of coatings for drugs and dietary supplements in a way that the concentration of the coating ingredients decrease or increase from the inner side of the coating to the outer side; the concentration gradient is achieved by spraying the components in form of solns. or dispersions from two or more nozzles; the components mix with each other during spraying and after evaporation a film is formed around the core. Cores are drug crystals, tablets, granules, pellets etc. Acid-sensitive substances can be coated with (meth)acrylate copolymers containing anionic groups in a way that the layers close to the cores contain neutralized anionic groups or a base; the outer layers contain increasing amts. of non-neutralized polymer or decreasing amts. of base. Similarly, base- or dye-sensitive substances can be coated by avoiding the critical component next to the core and increasing its concentration to the outer layer.

Thus a first spraying fluid contained (g): Eudragit L30 D-55 300; 1N sodium hydroxide 250; water 1050. The second spraying fluid included (g): Eudragit L30 D-55 300; 1N sodium hydroxide 250; pigment suspension 750; water 300. The pigment suspension was composed of (g): talc 100; titanium dioxide 50; color pigment 50; polyethylene glycol 6000 50; trisodium acetate citrate 5.5 hydrate 62; antifoaming agent 1; water 687.

TT 73590-58-6, Omeprazole 102625-70-7, Pantoprazole
103577-45-3, Lansoprazole 117976-89-3, Rabeprazole
119141-88-7, Esomeprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(acid-sensitive, coating of; method for preparation of coated drugs and
dietary supplements that include substances with a concentration gradient in
coating)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & O & Me \\ \hline N & S - CH_2 & N \\ \hline MeO & Me \\ \end{array}$$

RN 102625-70-7 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 103577-45-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 117976-89-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline N & O - (CH_2)_3 - OMe \end{array}$$

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

ANSWER 4 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:203830 CAPLUS

DOCUMENT NUMBER: 140:245456

TITLE: Amorphous hydrates of esomeprazole magnesium

and a process for their preparation

INVENTOR(S): Reddy, Manne Satyanarayana; Kumar, Muppa Kishore;

Purandhar, Koilkonda; Sreenath, Keshaboina

PATENT ASSIGNEE(S): Reddy's Laboratories Limited, India; Reddy's

Laboratories, Inc.

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	KIN	KIND DATE			2	APPL	ICAT		DATE							
WO 2004	WO 2004020436					A1 20040311			003-	US27		20030828				
W:	AE, A	AG, AI	, AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
	CO, C	CR, CU	, CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
	GM, I	HR, HU	, ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	
	LS, I	LT, LU	, LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
	PG, PH, PL,				RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,	TN,	
	TR, S	TT, TZ	, UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
RW:	GH, C	GM, KE	, LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
	KG, I	KZ, ME	, RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
	FI, I	FR, GE	, GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
	BF, F	BJ, CF	, CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG	
US 2004	A1		2004	0826	1	US 2	003-	6513	06	20030828						
PRIORITY APP					IN 2002-MA638						A 20020830					
OTHER SOURCE	MAR	PAT	140:	2454	56											

AB A trihydrate of esomeprazole magnesium in the form of an amorphous solid is prepared and described for use as a gastric acid inhibitor.

IT 161796-78-7, Esomeprazole sodium

RL: RCT (Reactant); RACT (Reactant or reagent)

(process for preparation of amorphous hydrates of esomeprazole magnesium for use in reducing gastric acid secretion)

RN 161796-78-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Na

IT 119141-88-7P, Esomeprazole

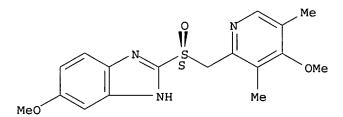
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(process for preparation of amorphous hydrates of esomeprazole magnesium for use in reducing gastric acid secretion)

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:19893 CAPLUS

DOCUMENT NUMBER:

140:59642

TITLE:

preparation of almost anhydrous lansoprazole from its

solvate and/or hydrate

INVENTOR(S):

Aihara, Kiyoshi; Hiroshige, Eiko; Yokogoshi, Kiyonori

PATENT ASSIGNEE(S): Permachem Asia, Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

: 1

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

JP 2004002230 A2 20040108 JP 2002-160105 20020531

PRIORITY APPLN. INFO.:

JP 2002-160105

20020531

OTHER SOURCE(S):

CASREACT 140:59642

AB Almost anhydrous lansoprazole (I, already know as antiulcer agent) is prepared by dissolving solvate and/or hydrate of I in solvent, crystallizing by aqueous alkali, and drying at low temperature Thus, I hydrate (H2O content 1.5%) was dissolved in DMF, treated with ammonia at pH 9, filtered, and dried at 40° for 12 h to give white I crystals, which contained 0.04% H2O.

IT 207790-96-3 637744-12-8

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)

(dehydration and/or desolvation of lansoprazole by crystallization by aqueous $% \left(1\right) =\left(1\right) +\left(1$

alkali and low-temperature drying)

RN 207790-96-3 CAPLUS

CN Ethanol, compd. with 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2 pyridinyl]methyl]sulfinyl]-1H-benzimidazole (1:1), monohydrate (9CI) (CA
 INDEX NAME)

CM 1

CRN 103577-45-3 CMF C16 H14 F3 N3 O2 S

CM 2

CRN 64-17-5 CMF C2 H6 O

 H_3C-CH_2-OH

RN 637744-12-8 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-, monohydrate (9CI) (CA INDEX NAME)

TΤ 103577-45-3P, Lansoprazole

RL: PUR (Purification or recovery); PREP (Preparation)

(dehydration and/or desolvation of lansoprazole by crystallization by aqueous

alkali and low-temperature drying)

RN 103577-45-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

ANSWER 6 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:900584 CAPLUS

DOCUMENT NUMBER:

140:321598

TITLE:

Interactions of Omeprazole and Precursors with

beta-Cyclodextrin Host Molecules

AUTHOR (S):

Braga, Susana S.; Ribeiro-Claro, Paulo; Pillinger, Martyn; Goncalves, Isabel S.; Fernandes, Ana C.; Pereira, Florbela; Romao, Carlos C.; Correia, Pedro

Brito; Teixeira-Dias, Jose J. C.

CORPORATE SOURCE:

CICECO, Department of Chemistry, University of Aveiro,

Aveiro, 3810-193, Port.

SOURCE:

Journal of Inclusion Phenomena and Macrocyclic

Chemistry (2003), 47(1-2), 47-52 CODEN: JIPCF5; ISSN: 1388-3127

PUBLISHER:

Kluwer Academic Publishers

DOCUMENT TYPE:

Journal

LANGUAGE: English

AR β -Cyclodextrin (β -CD) was mixed with omeprazole and some of its precursors in aqueous or water/ethanol solns., and the resulting crystalline products have been characterized by elemental anal., thermogravimetry, powder X-ray diffraction (XRD), FTIR and 13C CP MAS NMR spectroscopy. In the case of 2-chloromethyl-4-methoxy-3,5-dimethylpyridine·HCl, it was found that the solid product always consisted of pure β -CD hydrate. On the other hand, a 2:1 (host-to-guest) inclusion complex was obtained between β -CD and 2-methoxy-2mercaptobenzimidazole. The thioether intermediate 5-methoxy-2-[(3,5dimethyl-4-methoxy-2-pyridine) methylthio]-1H-benzimidazole and its sulfoxide derivative (omeprazole) both formed 1:1 inclusion complexes with $\beta\text{-CD}$. Powder XRD indicates that the crystal packing of β -CD host mols. is herringbone-type for the 2:1 complex, and channel-type for the 1:1 complexes. Ab initio calcns. were carried out to investigate the host-guest interactions. It was found that the interaction with the pyridine fragment is wholly repulsive, due to the presence of several ring substituents. On the other hand, the inclusion of the benzimidazole fragment is energetically favored, but highly dependent on the orientation of the substituent methoxy group. TΤ

678172-86-6 678172-87-7

RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)

(interactions of omeprazole and precursors with $\beta\text{-cyclodextrin}$ host mols.)

RN 678172-86-6 CAPLUS

CN β-Cyclodextrin, compd. with 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-

pyridinyl)methyl]thio]-1H-benzimidazole (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 73590-85-9 CMF C17 H19 N3 O2 S

$$\begin{array}{c|c} & \text{Me} \\ \hline & \text{N} \\ & \text{NH} \end{array} \\ \text{S-CH}_2 \\ \hline & \text{N} \\ \text{Me} \\ \end{array}$$

CM 2

CRN 7585-39-9 CMF C42 H70 O35

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

Н

RN 678172-87-7 CAPLUS

CN

β-Cyclodextrin, compd. with 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-

pyridinyl)methyl]sulfinyl]-1H-benzimidazole (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 73590-58-6 CMF C17 H19 N3 O3 S

$$\begin{array}{c|c} & & & \\ &$$

CM 2

CRN 7585-39-9 CMF C42 H70 O35

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

Н

73590-58-6 73590-85-9 RL: PRP (Properties)

(interactions of omeprazole and precursors with $\beta\text{-cyclodextrin}$ host mols.)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 73590-85-9 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ \hline & \text{N} \\ \hline & \text{NH} \\ \end{array} \\ \begin{array}{c} \text{S-CH}_2 \\ \hline & \text{N} \\ \end{array} \\ \begin{array}{c} \text{Me} \\ \\ \text{Me} \\ \end{array}$$

REFERENCE COUNT:

34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:154421 CAPLUS

DOCUMENT NUMBER:

138:187772

TITLE:

Method for the preparing crystals of

2-[(2-pyridinylmethyl)thio]-1H-benzimidazole

hydrates

INVENTOR(S):

Loebermann, Hartmut; Caster, Karl-Heinz

PATENT ASSIGNEE(S): Gr

Gruenenthal G.m.b.H., Germany

SOURCE: PCT Int. Appl., 16 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIND DATE				APPL	ICAT		DATE								
WO 2003016301					A1	1 20030227			,	WO 2	002-:		20020808						
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,		
		CO,	CR,	CU,	CZ,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,		
		HR,	HU,	ID,	IL,	IN,	IS,	J₽,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,		
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,		
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,		
		UG,	US,	UZ,	VC,	VN,	ΥU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,		
		TJ,	TM																
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	BG,		
		CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,		
		PT,	SE,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,		
		ΝE,	SN,	TD,	TG														
DE	1014	0492			A1	20030814		j	DE 2	001-		20010817							
CA	2457	576			AA	20030227			(CA 2002-2457576						20020808			

EP 2002-758447 EP 1421076 A1 20040526 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK 20040812 US 2004-772033 US 2004158072 A1 20040204 PRIORITY APPLN. INFO.: DE 2001-10140492 20010817 Α WO 2002-EP8867 W 20020808

OTHER SOURCE(S):

CASREACT 138:187772; MARPAT 138:187772

Ι

GI

$$\begin{bmatrix} R^2 \\ R^1 \\ N \end{bmatrix} = \begin{bmatrix} R^3 \\ R^4 \\ R^5 \end{bmatrix} = \begin{bmatrix} (H_2O)_x \\ R^3 \end{bmatrix}$$

AB Title compds. [I; R1-R3 = H, alkyl, cycloalkyl, fluoroalkyl, alkoxy; R4, R5 = H, alkyl, (methylene)cycloalkyl, alkoxycarbonyl, alkoxy, fluoroalkoxy, fluoroalkyl, carboxyalkyl; R6 = H, alkyl; x = 0.5-2], were prepared by reacting non-hydrated II (R4, R5 as above) with reactive III (R1-R3 and R6 as above) in the presence of a base. Isolation of I results by partially removal of organic solvent which is mixable with H2O followed by crystallization with 55 weight% H2O at <40°. Thus NaOH in EtOH was treated with 2-mercapto-5-methoxybenzimidazole followed by reflux with 2-chloromethyl-3,5-dimethyl-4-methoxypyridine hydrochloride for 14 h. The reaction mixture was crystallized with H2O at 25° to give 95% crystals of 5-methoxy-2-[(3,5-dimethyl-4-methoxypyridin-2-yl)methylthio]-1H-benzimidazole hydrate having a purity of 99.7%.

IT 73590-85-9P, Pyrmetazole

RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)

(method for preparing **crystals** of (pyridinylmethylthio)benzimida zole **hydrates**)

RN 73590-85-9 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ & \text{N} \\ & \text{N} \\ & \text{N} \\ & \text{Me} \\ \end{array}$$

ΙT 108928-02-5P

RL: PUR (Purification or recovery); PREP (Preparation)

(method for preparing crystals of (pyridinylmethylthio)benzimida zole hydrates)

RN108928-02-5 CAPLUS

1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-CN pyridinyl)methyl]thio]-, hydrochloride (9CI) (CA INDEX NAME)

●x HCl

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:851149 CAPLUS

DOCUMENT NUMBER:

136:5990

TITLE:

Process for producing crystal of optically

active 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-

pyridyl]methyl]sulfinyl]benzimidazole Hashimoto, Hideo; Maruyama, Hideaki

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 73 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR (S):

Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	rent	NO.						DATE APPLICATION NO.								DATE			
WO 2001087874 A1								1	WO 2	001-	20010515								
	₩:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,		
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,		
		GM,	HR,	HU,	ID,	ΙL,	IN,	IS,	JP,	KE,	KG,	KR,	KZ,	LC,	LK,	LR,	LS,		
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,		
		RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,		
							ΑZ,												
	RW:	GH,														CH,	CY,		
							GB,												
							GA,										-		
ΑU	2001															0010	515		
	2002																		
JР	3374	314			B2		2003	0204											
CA	2409	044			AA		2002	1114	(CA 2	001-	2409	044		2	0010	515		
JР	2002	3385	67		A2		2002	1127	,	JP 2	001-	1456	88		2	0010	515		
JР	2003	0553	72		A2		2003	0226		JP 2	002-	2294	02		2	0010	515		
EΡ	1293	507			A1		2003	0319]	EP 2	001-	9301	31		2	0010	515		
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,		
							RO,							•	•	•	•		
US	2003	1537	66		A1		2003	0814	1	JS 2	002-	2753	34		2	0021	107		

PRIORITY APPLN. INFO.:

JP 2000-141670 A 20000515 JP 2001-144635 A3 20010515 WO 2001-JP4014 W 20010515

OTHER SOURCE(S):

CASREACT 136:5990

Described is a process for producing crystals of (R) -2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]benzimidazole [(R)-I].n'H2O (wherein n' is about 0 to about 0.1) or of a salt thereof, characterized by subjecting a solution or dispersion in an organic solvent of (R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2pyridyl]methyl]sulfinyl]benz-imidazole .nH2O (wherein n is about 0.1 to about 1.0) to crystallization to crystallize out the target compound During examining various methods of preparing (R) - and (S)-I, it was found that there exist specific crystal forms for (R) - and (S) - I which are different from crystal forms of the sulfone derivative When these isomers are crystallized in these specific crystal forms, surprisingly the sulfone derivative, which is normally difficult to remove, is readily removed to give the desired isomer with very high optical purity. Thereby, this process is a simple process by which an optically active sulfoxide derivative can be efficiently and industrially mass-produced in high yield while attaining an extremely high enantiomer excess. (R)- and (S)-I possess antiulcer, anti-Helicobacter pylori, stomach-acid secretion inhibitory, and mucus membrane-protecting activity and are useful as antiulcer agents (no data). Thus, 0.747 L titanium isopropoxide was added to a mixture of 4.5 kg 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2pyridyl]methyl]thio]benzimidazole (1.89% water content), 22 L PhMe, 25 g H2O, 0.958 L (+)-tartaric acid di-Et ester at 50-60° and stirred at the same temperature for 30 min, followed by adding 0.733 ${\tt L}$ diisopropylethylamine at room temperature and then cumene hydroperoxide at -5° to 5°, and the resulting mixture was stirred at -5° to 5° for 1.5 h and treated with 17 L 30% sodium thiosulfate to decompose the residual cumene hydroperoxide. The organic layer was separated and

successively treated with H2O 4.5, heptane 13.5, tert-Bu Me ether 18, and heptane 27 L, and stirred at .apprx.10° for crystallization The precipitated crystals were separated and washed with 4 L tert-Bu Me ether-PhMe (4:1) to give wet crystals of (R)-I containing the sulfone derivative by 0.90% and no sulfide and other isomer with optical purity of 100% ee. A suspension of the latter crystals in 20 L acetone was added dropwise to a mixture of 7 L acetone and 34 L water and stirred at .apprx.10° and the precipitated crystals were separated and washed with a mixture of 4 L acetone and 12 L water to give wet crystals of (R)-I containing no sulfone and sulfide derivative and other isomer with optical purity of 100% ee. The latter wet crystals were dissolved in 45 L EtOAc and 3 L H2O and the organic layer was separated, filtered

to remove insol. matter, treated with 0.2 L Et3N, concentrated to .apprx.7 L, and treated with 2.3L MeOH and then with .apprx.12.5% aqueous NH3 (23 L, .apprx.50°) and 22 L tert-Bu Me ether (.apprx.50°). The organic layer was separated while saving the water layer and those in the following procedure, and treated with .apprx.12.5% aqueous NH3, followed by separating the organic layer, and this procedure was repeated one more time.

The

separated water layers were combined, treated with 22 L EtOAc, adjusted to pH .apprx.8 by adding dropwise AcOH, followed by separating the organic layer and extracting the water layer with 11 L EtOAc. The organic layers were combined, washed with 11 L .apprx.20% aqueous NaCl, treated with 0.2 L Et3N, concentrated under reduced pressure, treated with 5 L acetone, and concentrated under reduced

pressure. The concentrate was dissolved in 9 L acetone and the solution was added

dropwise to a mixture of 4.5 L acetone and 22.5 L H2O, followed by adding dropwsie 18 L water to the resulting mixture The resulting mixture was

stirred at .apprx.10° and the precipitated **crystals** were separated and successively washed with a cold 1:3 mixture of acetone and water (3 L) and then 12 L water to give wet **crystals** of (R)-I containing no sulfone and sulfide derivative and other isomer with optical purity of 100% ee. The latter wet **crystals** were dissolved in 32 L EtOAc,

followed by separating the water layer, and the organic layer was concentrated under

reduced pressure to .apprx.14 L, treated with 36 L EtOAc and 270 g activated charcoal, stirred, and filtered to remove the activated charcoal. The filtrate was concentrated under reduced pressure to .apprx.14 L, followed by adding 90 L heptane to the concentrate at .apprx.40° and stirring the resulting mixture at .apprx.40° for 30 min., and the precipitated crystals were separated, washed with a 1:8 mixture of EtOAc and heptane (6 L), and dried to give 3.4 kg (R)-I containing no sulfone and sulfide derivative and other isomer with optical purity of 100% ee, which had specific peaks in powder X-ray diffraction anal.

IT 103577-40-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(asym. oxidation; process for producing optically active
[[[methyl(fluoroethoxy)pyridyl]methyl]sulfinyl]benzimidazole in
specific crystal forms by crystallization)

RN 103577-40-8 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]thio]- (9CI) (CA INDEX NAME)

$$S-CH_2$$
 Me
 $O-CH_2-CF_3$

IT 138530-94-6P 138530-95-7P

RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(process for producing optically active [[[methyl(fluoroethoxy)pyridyl] methyl]sulfinyl]benzimidazole in specific crystal forms by crystallization)

RN 138530-94-6 CAPLUS

CN 1H-Benzimidazole, 2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 138530-95-7 CAPLUS

CN 1H-Benzimidazole, 2-[(S)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 374782-41-9P, (R)-2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)-2 pyridyl]methyl]sulfinyl]benzimidazole hydrate
374782-42-0P, (S)-2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)-2 pyridyl]methyl]sulfinyl]benzimidazole hydrate
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(process for producing optically active [[[methyl(fluoroethoxy)pyridyl] methyl]sulfinyl]benzimidazole in specific crystal forms by crystallization)

RN 374782-41-9 CAPLUS

CN 1H-Benzimidazole, 2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-, hydrate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

●x H20

RN 374782-42-0 CAPLUS

CN 1H-Benzimidazole, 2-[(S)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-, hydrate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

●x H₂O

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:828927 CAPLUS

DOCUMENT NUMBER:

135:362587

TITLE:

Cyclodextrin-containing pharmaceutical formulations

for benzimidazole derivatives

INVENTOR(S):

Whittle, Robert R.; Sancilio, Frederick D.; Stowell, Grayson Walker; Jenkins, Douglas John; Whittall, Linda

B.; Meyer, Glenn Alan

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S., 36 pp., Cont.-in-part of U.S. 6,202,085.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 6316020	B1	20011113	US 2000-629587		20000731
US 6262085	B1	20010717	US 2000-519976		20000307
PRIORITY APPLN. INFO.:			US 1999-150878P	P	19990826
			US 2000-519976	A2	20000307

OTHER SOURCE(S): MARPAT 135:362587

Pharmaceutical compns. comprise a benzimidazole derivative as an active ingredient or a pharmaceutically acceptable salt, solvate, hydrate , or their combinations with at least one cyclodextrin and at least one pharmaceutically acceptable carrier, diluent, or excipient. For example, to a 50 mL beaker about 1 g of 5(6)-methoxy-2-[[(4-methoxy-3,5-dimethyl-2pyridinyl) methyl] sulfinyl] -1H-benzimidazole was added to 30 mL of methylene chloride. Addnl. 5(6)-methoxy-2-[[(4-methoxy-3,5-dimethyl-2pyridinyl) methyl] sulfinyl] -1H-benzimidazole was added to the resulting solution until a suspension of the material was formed. The solution was stirred for approx. 10 min, and then filtered through a 0.45 µm PTFE or Nylon filter. The resulting saturated solution was placed in a beaker, covered,

and stored under refrigerated conditions (approx. 5°) until crystals formed (between 1-2 days). The identity of the title compound was confirmed by single crystal x-ray diffraction and/or Raman spectroscopy. The resulting material was determined to contain about 84-88% (weight/weight) of the 6-methoxy-2-[[(4-methoxy-3,5-dimethyl-2pyridinyl)methyl]sulfinyl]-1 H-benzimidazole and about 12-16% (weight/weight) (I) of the 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2pyridinyl)methyl]sulfinyl]-1 H-benzimidazole (II). I and II were formulated in various dosage forms, such as tablets, capsules, enteric-coated tablets, and solns. for inhibiting gastric acid secretion. The formulations contained a cyclodextrin, e.g. hydroxypropyl β -cyclodextrin, in a drug to cyclodextrin ratio of 1:4-1:20 to increase drug solubility

ΙT 73590-58-6 95510-70-6 119141-88-7 119141-89-8 161796-77-6 161796-78-7 372518-59-7

> RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(crystallization of benzimidazole derivs. for formulations containing cyclodextrin)

73590-58-6 CAPLUS RN

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 95510-70-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

Na

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 119141-89-8 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 161796-77-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Na

RN 161796-78-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Na

RN 372518-59-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, magnesium salt, octahydrate (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

●1/2 Mg

●4 H₂O

REFERENCE COUNT:

147 THERE ARE 147 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

CN

ANSWER 10 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 2001:338762 CAPLUS DOCUMENT NUMBER: 134:362292 TITLE: Methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile INVENTOR(S): Farr, Spencer Phase-1 Molecular Toxicology, USA PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 222 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: KIND DATE APPLICATION NO. PATENT NO. DATE ----_____ -----_____ WO 2001032928 A2 20010510 WO 2000-US30474 20001103 A2 A3 WO 2001032928 20020725 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 1999-165398P P 19991105 US 2000-196571P P 20000411 The invention discloses methods, gene databases, gene arrays, protein AB arrays, and devices that may be used to determine the hypersensitivity of individuals to a given agent, such as drug or other chemical, in order to prevent toxic side effects. In one embodiment, methods of identifying hypersensitivity in a subject by obtaining a gene expression profile of multiple genes associated with hypersensitivity of the subject suspected to be hypersensitive, and identifying in the gene expression profile of the subject a pattern of gene expression of the genes associated with hypersensitivity are disclosed. The gene expression profile of the subject may be compared with the gene expression profile of a normal individual and a hypersensitive individual. The gene expression profile of the subject that is obtained may comprise a profile of levels of mRNA or cDNA. The gene expression profile may be obtained by using an array of nucleic acid probes for the plurality of genes associated with hypersensitivity. The expression of the genes predetd. to be associated with hypersensitivity is directly related to prevention or repair of toxic damage at the tissue, organ or system level. Gene databases arrays and apparatus useful for identifying hypersensitivity in a subject are also disclosed. TΤ 73590-58-6, Omeprazole 103577-45-3, Lansoprazole 117976-89-3, Rabeprazole RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile) RN 73590-58-6 CAPLUS

1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-

pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 103577-45-3 CAPLUS

1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-CN pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{Me} \\
 & \text{N} \\
 & \text{S-CH}_2 \\
 & \text{N}
\end{array}$$

$$\begin{array}{c}
 & \text{Me} \\
 & \text{O-CH}_2 - \text{CF}_3 \\
 & \text{N}
\end{array}$$

RN 117976-89-3 CAPLUS

CN 1H-Benzimidazole, 2-[[4-(3-methoxypropoxy)-3-methyl-2pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
H & O \\
N & S - CH_2 \\
N & O - (CH_2)_3 - OMe
\end{array}$$

ANSWER 11 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1999:758297 CAPLUS

DOCUMENT NUMBER:

132:325917

TITLE:

Sorption/desorption study of PP/K-10 ethanol and

ethanol-water solvate with DVS

AUTHOR (S):

Gartner, A.; Pavli, V.; Vrecer, F.

CORPORATE SOURCE: SOURCE:

R & D Div., KRKA, Novo mesto, 8501, Slovenia Farmacevtski Vestnik (Ljubljana) (1999), 50(Pos.

Stev.), 345-346

CODEN: FMVTAV; ISSN: 0014-8229

Slovensko Farmacevtsko Drustvo

DOCUMENT TYPE:

Journal

LANGUAGE:

PUBLISHER:

English

The results of DVS (Dynamic Vapor Sorption) study of the sorption/desorption properties of two PP/K-10 (2-[[[2(1H)benzimidazolyl]sulfinyl]methyl]3-methyl-4-(2,2,2-trifluoroethoxy)pyridine) solvates, i.e. ethanolate and ethanolate-hydrate, are presented and the possible mechanism of water sorption and desorption of both solvates is discussed. In the structure of both desolvated products, mols. of the solvent are trapped in the structure of the crystals Water with higher activity began supplanting the solvent mols. in the structure and total mass was decreasing. In the sec. cycle this

phenomenon disappeared and both products showed nearly the same isotherms. The resemblance of sorption/desorption behavior of both solvates was attributed to the similarity in structure of both solvates and likeness of

the sorption and desorption mechanisms. The similarity of structures was confirmed by x-ray diffraction, DSC and TG anal.

266306-09-6, PP/K-10 ethanolate hydrate 266356-21-2, PP/K-10 ethanolate IT

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(sorption/desorption of solvates of benzimidazole derivative PP/K-10)

266306-09-6 CAPLUS RN

Ethanol, compd. with 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-CN pyridinyl]methyl]sulfinyl]-1H-benzimidazole, hydrate (9CI) (CA INDEX NAME)

CM 1

103577-45-3 CRN

CMF C16 H14 F3 N3 O2 S

$$\begin{array}{c|c}
N & Me \\
S - CH_2 & O - CH_2 - CF_3
\end{array}$$

CM 2

CRN 64-17-5 CMF C2 H6 O

 H_3C-CH_2-OH

RN 266356-21-2 CAPLUS

CN Ethanol, compd. with 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2pyridinyl]methyl]sulfinyl]-1H-benzimidazole (9CI) (CA INDEX NAME)

CM 1

CRN 103577-45-3

C16 H14 F3 N3 O2 S CMF

CM 2

CRN 64-17-5

CMF C2 H6 O

 H_3C-CH_2-OH

L3 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1997:724482 CAPLUS

DOCUMENT NUMBER:

127:362541

TITLE:

Solid state characterization of K-1252

AUTHOR (S):

Kotar-Jordan, B.; Vrecer, F.

CORPORATE SOURCE:

KRKA, d.d., Novo Mesto, R&D Division, Novo Mesto,

8501, Slovenia

SOURCE:

Farmacevtski Vestnik (Ljubljana) (1997), 48 (Pos.

Stev.), 288-289

CODEN: FMVTAV; ISSN: 0014-8229 Slovensko Farmacevtsko Drustvo

DOCUMENT TYPE:

Journal

LANGUAGE:

PUBLISHER:

English

AB Two polymorphs, 2 hydrates (ratios 4:3 and 4:1) and solvates of K-1252 [2-[[[3-methyl-4-(2,2,2,-trifluoroethoxy)-2-pyridyl]methyl]thio]-1H-benzimidazole] were isolated and characterized by DSC, thermogravimetric anal., FT-IR, powder diffractometry and NMR.

IT 103577-40-8, K 1252 198544-90-0 198544-91-1

198544-92-2 198544-93-3

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(solid state characterization of K-1252 benzimidazole)

RN 103577-40-8 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]thio]- (9CI) (CA INDEX NAME)

$$S-CH_2$$
 N
 $O-CH_2-CF_3$

RN 198544-90-0 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]thio]-, hydrate (4:3) (9CI) (CA INDEX NAME)

●3/4 H₂O

RN 198544-91-1 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]thio]-, hydrate (4:1) (9CI) (CA INDEX NAME)

●1/4 H₂O

RN 198544-92-2 CAPLUS

CN 2-Propanol, compd. with 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]thio]-1H-benzimidazole (9CI) (CA INDEX NAME)

CM 1

CRN 103577-40-8

CMF C16 H14 F3 N3 O S

$$\begin{array}{c|c} H \\ N \\ S - CH_2 \\ \hline \\ N \\ O - CH_2 - CF_3 \\ \end{array}$$

CM 2

CRN 67-63-0 CMF C3 H8 O

RN 198544-93-3 CAPLUS

CN Ethanol, compd. with 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]thio]-lH-benzimidazole (9CI) (CA INDEX NAME)

CM 1

CRN 103577-40-8

CMF C16 H14 F3 N3 O S

$$S-CH_2$$
 N
 N
 $O-CH_2-CF_3$

CM 2

CRN 64-17-5 CMF C2 H6 O

 $_{
m H_3C-CH_2-OH}$

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> file caplus

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1.1

STR

G1 H, Ak

Structure attributes must be viewed using STN Express query preparation.

3428 SEA FILE=REGISTRY SSS FUL L1

L44316 SEA FILE=CAPLUS L3

L5 44 SEA FILE=CAPLUS L4 AND HYDRATE#

=> d l5 1-44 ibib abs hitstr

ANSWER 1 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:405393 CAPLUS

TITLE:

Albumin binding sites for evaluating drug interactions and methods of evaluating or designing drugs based on

their albumin binding properties

INVENTOR(S): PATENT ASSIGNEE(S): Carter, Daniel C.; Ho, Joseph; Wang, Zhongmin

New Century Pharmaceuticals, Inc., USA

SOURCE:

PCT Int. Appl., 74 pp.

DOCUMENT TYPE:

CODEN: PIXXD2

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

KIND DATE APPLICATION NO.

DATE

CN

WO 2004-US36437 WO 2005041895 A2 20050512 20041103 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 2003-516311P P 20031103 A method is provided for evaluating drug compds. based on their binding properties to human serum albumin wherein structural information at particular albumin binding regions is entered into a computer database and assessed with regard to particular contacting binding residues located in accordance with the invention. The information obtained through the computer database is thus useful in assessing and predicting drug interactions at albumin binding sites. Further, protein fragments including one or more albumin binding sites are provided which can be used in methods of assessing and designing drugs. IT 119141-88-7, Esomeprazole RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (albumin binding sites for evaluating drug interactions, and methods for evaluating or designing drugs based on albumin binding properties) 119141-88-7 CAPLUS RN

1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-

pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

KIND

Absolute stereochemistry. Rotation (-).

PATENT NO.

```
ANSWER 2 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                         2005:349001 CAPLUS
DOCUMENT NUMBER:
                         142:386016
TITLE:
                         Use of N-desmethylclozapine to treat human
                         neuropsychiatric disease
INVENTOR(S):
                         Weiner, David M.; Brann, Mark R.
PATENT ASSIGNEE(S):
SOURCE:
                         U.S. Pat. Appl. Publ., 34 pp., Cont.-in-part of U.S
                         Ser. No. 761,787.
                         CODEN: USXXCO
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
```

APPLICATION NO.

DATE

DATE

US 2005085463 A1 20050421 US 2004-913117 20040805 US 2004224942 A1 20041111 US 2004-761787 20040121 PRIORITY APPLN. INFO.: US 2003-442690P P 20030123 US 2004-761787 A2 20040121

AB Disclosed herein is a method to treat neuropsychiatric diseases including psychosis, affective disorders, dementia, neuropathic pain, and glaucoma. Treatment is carried out by administering a therapeutically effective amount of N-desmethylclozapine to a patient suffering from a neuropsychiatric disease.

IT 73590-58-6, Omeprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(use of N-desmethylclozapine to treat human neuropsychiatric disease)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

L5 ANSWER 3 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:216709 CAPLUS

DOCUMENT NUMBER: 142:291393

TITLE: Compositions useful for treating qastrointestinal

motility disorders

INVENTOR(S): Landau, Steven B.; Ashburn, Theodore T.

PATENT ASSIGNEE(S): Dynogen Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.						KIND DATE				APPL	ICAT		DATE					
- - ·	- -	-																
WO	WO 2005021040			A2 20050310			1	WO 2	004-		20040827							
	W: AE, AG, AL,			AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DΕ,	DK,	DM,	DZ,	EC,	ĒE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	
		SN,	TD,	TG														
US	US 2005059704				A1		2005	0317	1	US 2	004-	9286	24	20040827				
PRIORITY	PRIORITY APPLN. INFO.:			.:				US 2003-499200P					P 20030829					
									1	US 2	004-	5982	35P		P 2	0040	303	
OTHER COURGE (C).					MADE	חתכם	140	2012	2.2									

OTHER SOURCE(S): MARPAT 142:291393

AB The present invention relates to method of treating a gastrointestinal motility disorder in a subject in need of treatment comprising coadministering to said subject a first amount of a compound having 5-HT3

receptor agonist activity or a pharmaceutically acceptable salt, hydrate or solvate thereof; and a second amount of at least one gastric acid suppressing agent (e.g., a proton pump inhibitor, an H2 receptor antagonist or a pharmaceutically acceptable salt, hydrate or solvate thereof, or an acid pump antagonist or pharmaceutically acceptable salt, hydrate or solvate thereof) wherein the first and second amts. together comprise a therapeutically effective amount In particular, the method is for treating gastroesophageal reflux disease (GERD), including nocturnal GERD. The invention further relates to a method of treating nocturnal GERD comprising administering to a subject in need thereof a therapeutically effective amount of a compound having 5-HT3 receptor agonist activity or a pharmaceutically acceptable salt, hydrate or solvate thereof. The invention further relates to a method of increasing esophageal motility in a subject in need thereof. The method of increasing esophageal motility can be achieved by administration of a compound having 5-HT3 receptor agonist activity or a pharmaceutically acceptable salt, hydrate or solvate thereof. The coadministration can also be used to increase esophageal motility.

TT 73590-58-6, Omeprazole 102625-70-7, Pantoprazole
103577-45-3, Lansoprazole 117976-89-3, Rabeprazole
119141-88-7, Esomeprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. useful for treating gastrointestinal motility disorders containing 5-HT3 receptor agonists and gastric acid suppressing agents)

RN 73590-58-6 CAPLUS

CN

1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 102625-70-7 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 103577-45-3 CAPLUS

CN lH-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 117976-89-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
H & O \\
N & S - CH_2 \\
N & O - (CH_2)_3 - OMe
\end{array}$$

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L5 ANSWER 4 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:120919 CAPLUS

DOCUMENT NUMBER:

142:204622

TITLE:

Novel salt of (R)-pantoprazole

INVENTOR(S):

Kohl, Bernhard; Mueller, Bernd; Sturm, Ernst; Hummel,

Rolf-Peter; Simon, Wolfgang-Alexander; Kromer, Wolfgang; Postius, Stefan; Hanauer, Guido; Huber,

Reinhard

PATENT ASSIGNEE(S):

Altana Pharma AG, Germany

SOURCE:

PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2005012289	A1 2005021	0 WO 2004-EP51511	20040715
W: AE, AG,	AL, AM, AT, AU, AZ	, BA, BB, BG, BR, BW, BY,	BZ, CA, CH,
CN, CO,	CR, CU, CZ, DE, DK	, DM, DZ, EC, EE, EG, ES,	FI, GB, GD,
		, IN, IS, JP, KE, KG, KP,	

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

EP 2003-16202 A 20030717

AB The invention relates to (+)-pantoprazole magnesium hydrates and to medicaments comprising these compds. Thus, 25 g (+)-pantoprazole sodium hydrate was suspended in 250 mL of water, heated to 35-40° and stirred for 30 min to give a clear solution After cooling to 22-27°, 6.93 g of magnesium dichloride hexahydrate in 45 mL of water was added dropwise and the mixture stirred at room temperature for 72 h. The resulting suspension was filtered with suction, the precipitate washed with 3

portions of 100 mL of water and dried at $40-45^{\circ}$ to afford 24.0 g (+)-pantoprazole magnesium dihydrate (yield 94.3 %), in form of a white crystalline powder, m.p. = $160-164^{\circ}$ (decomposition).

IT 164579-32-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(novel salt of (R)-pantoprazole)

RN 164579-32-2 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt, hydrate (2:3) (9CI) (CA INDEX NAME)

$$F_2CH-O \longrightarrow \begin{matrix} H & O \\ N & S - CH_2 \end{matrix} \longrightarrow \begin{matrix} N \\ MeO \end{matrix}$$

Na

●3/2 H₂O

IT 471293-63-7P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(novel salt of (R)-pantoprazole)

RN 471293-63-7 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, magnesium salt, dihydrate (9CI) (CA INDEX NAME)

●1/2 Mg

● H₂O

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

7

ACCESSION NUMBER:

2005:120730 CAPLUS

DOCUMENT NUMBER:

142:191275

TITLE:

Method for reducing the volume of gastric refluxate

with two-minute infusion of pantoprazole

INVENTOR(S):

Karlstadt, Robyn

PATENT ASSIGNEE(S):

Altana Pharma AG, Germany

SOURCE:

PCT Int. Appl., 7 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

refluxate)

PATENT INFORMATION:

	DATENT NO	IZ T NI	בושעם ח	מחג	NT T C'D MT (NT)	NO.	ביא שבו				
	PATENT NO.	KIN		APP	LICATION I	NO.					
	WO 2005011670			10 20							
							20040730				
							BZ, CA, CH,				
							FI, GB, GD,				
	GE, G	H, GM, HR,	HU, ID, I	L, IN, IS	, JP, KE,	KG, KP,	KR, KZ, LC,				
	LK, L	R, LS, LT,	LU, LV, M	A, MD, MG	, MK, MN,	MW, MX, I	MZ, NA, NI,				
	NO, N	Z, OM, PG,	PH, PL, P	T, RO, RU	, SC, SD,	SE, SG, S	SK, SL, SY,				
							ZA, ZM, ZW				
							ZM, ZW, AM,				
							CZ, DE, DK,				
							PT, RO, SE,				
							ML, MR, NE,				
	SN, TI			o, ol, o	., 6.1, 6.1,	02, 0, .	1111, 1111,				
PRIC	RITY APPLN. IN	•		110	2003-49126	ם מוב	20030731				
AB	The invention		o a new ug								
1.0	short-infusion										
	two-minute in				d Overall	gastric	volume and				
T (T)	gastric acid										
ΙT	102625-70-7,					∍,					
	enantiomers,										
	Pantoprazole s	sodium 142	678-35-1,	(S)-Panto	prazole						
	142706-18-1										
	RL: BSU (Biolo	ogical stud	dy, unclas	sified);	PAC (Pharm	nacologica	al activity)				
	TILL (Themeneut						-				

THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pantoprazole two-minute infusion for reducing volume of qastric

RN 102625-70-7 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$F_2CH-O$$
 N
 S
 S
 CH_2
 N
 N
 N
 N
 N
 N

RN 102625-70-7 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 138786-67-1 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 142678-35-1 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[(S)-[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 142706-18-1 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[(R)-[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

$$F_2CH$$
 N S R OMe

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

1

ACCESSION NUMBER:

2005:92513 CAPLUS

DOCUMENT NUMBER:

142:183433

TITLE:

Stabilization of therapeutic agents using a carbonate

salt of an amino acid in the presence of a saccharide

and pharmaceutical compositions

INVENTOR(S):

Lulla, Amar; Malhotra, Geena

PATENT ASSIGNEE(S):

Cipla Limited, India

SOURCE:

Brit. UK Pat. Appl., 35 pp.

CODEN: BAXXDU

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.					KIND DATE		1	APPLICATION NO.						DATE			
GB 2404336 A1 20					2005	0202	(GB 2	003-	1787	7		2	0030	730		
WO	WO 2005011737 A2					2005	0210	1	WO 2	004-0	GB33	05		2	0040	730	
WO	WO 2005011737				A3	3 20050421											
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DΖ,	EC,	ΕE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
								CG,									
			TD,									•		-	•	·	•

PRIORITY APPLN. INFO.:

GB 2003-17877 A 20030730

Therapeutic agents, which are degrade when present in a pharmaceutical formulation, may be stabilized by admixing a stabilizing agent comprising at least one carbonate salt of an amino acid, wherein, at least in the case where the therapeutic agent is a HMG-CoA reductase inhibitor, or an ACE inhibitor, the stabilizing agent is enhanced by further comprising one or more saccharides. The therapeutic agent susceptible to degradation may be selected from HMG-CoA reductase inhibitors, ACE inhibitors, antihistaminics, benzimidazoles and anti-viral agents, (including nucleoside reverse transcriptase inhibitors). The carbonate salt of the amino acid is preferably present as either the group I or II alkali or alkali earth metal salt thereof, and the amino acid is preferably selected from the group consisting of glycine, arginine and lysine. The saccharide is preferably selected from the group consisting of lactose, sucrose, glucose, mannitol, xylitol, maltitol, sorbitol and erythritol, either in anhydrous or hydrated form. Such combinations may be combined with a pharmaceutically acceptable carrier or excipient to provide a

pharmaceutical formulation. Tablets were prepared from a dry mix containing quinapril-HCl, monosodium glycine carbonate, lactose and Crosspovidone. Binder solution, lubricants, and coatings were also used.

IT 73590-58-6, Omeprazole 102625-70-7, Pantoprazole
 103577-45-3, Lansoprazole 117976-89-3, Rabeprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (stabilization of therapeutic agents using a carbonate salt of an amino acid in presence of a saccharide and pharmaceutical compns.)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & O & Me \\ \hline N & S - CH_2 & N \\ \hline MeO & Me \\ \end{array}$$

RN 102625-70-7 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 103577-45-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & Me \\
S - CH_2 & O - CH_2 - CF_3
\end{array}$$

RN 117976-89-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

5

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline N & O - (CH_2)_3 - OMe \end{array}$$

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:899487 CAPLUS

DOCUMENT NUMBER: 141:325755

TITLE: Method for treating and preventing relapses of

uncomplicated forms of gastric and duodenal ulcerous

disease

INVENTOR(S): Korot'ko, G. G.; Tsybusova, V. P.; Isavtsev, K. I.;

Lushchik, V. A.

PATENT ASSIGNEE(S): Obshchestvo Ogranichennoi Otvetstvennost'yu

Predpriyatie "Kuban'agrotok", Russia

SOURCE: Russ., No pp. given

CODEN: RUXXE7

DOCUMENT TYPE: Patent LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. ______ --------------C2 RU 2238742 20041027 RU 2002-109355 PRIORITY APPLN. INFO.: RU 2002-109355 The present invention relates to a method of treating and preventing relapses of uncomplicated forms of erosive-ulcerous gastric and duodenal destructions. The method comprises enteral intake of antibacterial and antisecretory prepns. As antibacterial, solution of hydrated silver in distillate is used, at a daily dosage of 70 mcg silver, for no longer than 20 d. Addnl., endoscopic irrigation of the ulcerous defect is performed, with solution of hydrated silver in distillate, 20 mL, at concentration of 2 mg/l. The method provides accelerated healing of the ulcerous defects due to impact on the pathogenic microflora as well as improved microcirculation around the ulcer with min. side effects.

IT **73590-58-6**, Omeprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treating and preventing relapses of uncomplicated gastric and duodenal ulcerous disease)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

L5 ANSWER 8 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:780561 CAPLUS

DOCUMENT NUMBER: 141:254601

TITLE: Preventive or remedy for teeth grinding containing

gastric acid inhibitors

INVENTOR(S): Miyawaki, Shouichi; Yamamoto, Teruko

PATENT ASSIGNEE(S): Eisai Co. Ltd., Japan SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

¹: 1

PATENT INFORMATION:

	PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
			WO 2004-JP939				
			BA, BB, BG, BR, BW,				
			DM, DZ, EC, EE, EG,				
	GE, GH, GM,	HR, HU, ID, IL,	IN, IS, JP, KE, KG,	KP, KR, KZ, LC,			
	LK, LR, LS,	LT, LU, LV, MA,	MD, MG, MK, MN, MW,	MX, MZ, NA, NI,			
	NO, NZ, OM,	PG, PH, PL, PT,	RO, RU, SC, SD, SE,	SG, SK, SL, SY,			
	TJ, TM, TN,	TR, TT, TZ, UA,	UG, US, UZ, VC, VN,	YU, ZA, ZM, ZW			
	RW: BW, GH, GM,	KE, LS, MW, MZ,	SD, SL, SZ, TZ, UG,	ZM, ZW, AM, AZ,			
	BY, KG, KZ,	MD, RU, TJ, TM,	AT, BE, BG, CH, CY,	CZ, DE, DK, EE,			
	ES, FI, FR,	GB, GR, HU, IE,	IT, LU, MC, NL, PT,	RO, SE, SI, SK,			
	TR, BF, BJ,	CF, CG, CI, CM,	GA, GN, GQ, GW, ML,	MR, NE, SN, TD, TG			
PRIC	RITY APPLN. INFO.:		JP 2003-68755	A 20030313			
AB	It is intended to p	rovide a prevent:	ive or a remedy for t	teeth grinding and			
	diseases relating t	hereto which cont	tains as the active :	ingredient at least			
			on pump inhibitors, l				
			. Examples of the pr				
	inhibitors include	rabeprazole, omeņ	prazole, esomeprazole	e, lansoprazole,			
			thereof and hydrates				
	same. The effect o	f rabeprazole so	dium salt tablet (Par	riet) in patients			
	with teeth grinding						
ΙT	73590-58-6 , Omepraz	ole 102625-70-7 ,	Pantoprazole				
	103577-45-3, Lansop	razole 117976-89	-3 , Rabeprazole				
	117976-90-6, Rabepr	azole sodium 119 :	141-88-7,				
	Esomeprazole						
	RL: PAC (Pharmacolo	gical activity);	THU (Therapeutic use	e); BIOL			
	(Biological study);						
	(preventive or r	emedy for teeth o	grinding and teeth gr	rinding-related			
	disease containi			_			
RN	73590-58-6 CAPLUS						
CN	1H-Benzimidazole, 5	-methoxy-2-[[(4-r	methoxy-3,5-dimethyl-	-2-			
	pyridinyl)methyl]su	lfinyl]- (9CI)	(CA INDEX NAME)				

RN 102625-70-7 CAPLUS

CN lH-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 103577-45-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-

pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & Me \\
S - CH_2 & Me
\end{array}$$

$$\begin{array}{c|c}
O - CH_2 - CF_3
\end{array}$$

RN 117976-89-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
H & O \\
N & \parallel \\
S - CH_2 & N \\
O - (CH_2)_3 - OMe
\end{array}$$

RN 117976-90-6 CAPLUS

CN 1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridinyl]methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

Na

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER:

2004:740315 CAPLUS

DOCUMENT NUMBER:

141:265972

TITLE:

Preparation of crystal polymorphs of the antiulcer

agent S-omeprazole and its hydrates

INVENTOR (S):

Kumar, Yatendra; Khanna, Mahavir Singh; Prasad, Mohan

Ranbaxy Laboratories Limited, India

SOURCE:

PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

GI

FAMILY ACC. NUM. COUNT:

PATENT ASSIGNEE(S):

English

PATENT INFORMATION:

PATE	PATENT NO.					KIND DATE			APPLICATION NO.						DATE		
WO 2	WO 2004076440				A1 20040910			WO 2004-IB535						20040301			
	W:	ΑE,	ΑE,	AG,	AL,	AL,	AM,	AM,	AM,	AT,	AT,	AU,	AZ,	AZ,	BA,	BB,	BG,
		BG,	BR,	BR,	BW,	BY,	BY,	BZ,	BZ,	CA,	CH,	CN,	CN,	CO,	CO,	CR,	CR,
		CU,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	DZ,	EC,	EC,	EE,	EE,	EG,	ES,
		ES,	FI,	FΙ,	GB,	GD,	GE,	GE,	GH,	GM,	HR,	HR,	HU,	HU,	ID,	IL,	IN,
		IS,	JP,	JP,	ΚE,	KΕ,	KG,	KG,	KP,	ΚP,	KP,	KR,	KR,	ΚZ,	ΚZ,	KZ,	LC,
		LK,	LR,	LS,	LS,	LT,	LU,	LV,	MA,	MD,	MD,	MG,	MK,	MN,	MW,	MX,	MX,
		MZ,	MZ,	NA,	NI												
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,
		BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,
		MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,
		GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,
		GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG							
PRIORITY	APP	LN.	INFO	.:						IN 2	003-1	DE19:	9	i	A 20	0030	228

AB Polymorphic forms of the S-enantiomer of omeprazole, S-5-methoxy-2-[[(4methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole (I), and its hydrates, are prepared and characterized.

IT 119141-88-7, S-Omeprazole 755036-61-4, S-Omeprazole sesquihydrate

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(preparation of crystal polymorphs of the antiulcer agent S-omeprazole and its hydrates)

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2pyridinyl)methyl]sulfinyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 755036-61-4 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, hydrate (2:3) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●3/2 H₂O

IT 161796-84-5

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of crystal polymorphs of the antiulcer agent S-omeprazole and
 its hydrates)

RN 161796-84-5 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, potassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

● K

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:589351 CAPLUS

DOCUMENT NUMBER:

141:115951

TITLE:

Preparation of magnesium salts of rabeprazole, an

imidazole derivative, for treatment or prevention of

gastrointestinal ulcers

INVENTOR(S): PATENT ASSIGNEE(S): Kumar, Yatendra; Prasad, Mohan; Kumar, Neela Praveen

Ranbaxy Laboratories Limited, India

SOURCE:

GI

PCT Int. Appl., 14 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.					KIND DAT		DATE	DATE		APPLICATION NO.						DATE		
	WO 2004060263				A2 20040722			WO 2004-IB10						20040107					
	WO	2004	0602	63		A3 20040910													
		W:	ΑE,	ΑE,	AG,	AL,	AL,	AM,	AM,	AM,	AT,	ΑT,	AU,	AU,	ΑZ,	ΑZ,	BA,	BB,	
			BG,	BG,	BR,	BR,	BW,	BY,	BY,	ΒZ,	ΒZ,	CA,	CH,	CN,	CN,	CO,	CO,	CR,	
			CR,	CU,	CU,	CZ,	CZ,	DE,	DΕ,	DK,	DK,	DM,	DZ,	EC,	EC,	ΕE,	EE,	EG,	
			ES,	ES,	FI,	FΙ,	GB,	GD,	GE,	GE,	GH,	GH,	GH,	GM,	HR,	HR,	HU,	ΗU,	
			ID,	IL,	IN,	IS,	JP,	JP,	KE,	ΚE,	KG,	KG,	ΚP,	ΚP,	KP,	KR,	KR,	ΚZ,	
			ΚZ,	KZ,	LC,	LK,	LR,	LS,	LS,	LT,	LU,	LV,	MA,	MD,	MD,	MG,	MK,	MN,	
			MW,	MX,	MX,	MZ													
PRIO	RITY	APP	LN.	INFO	.:						IN 2	003-	DE20		į	A 2	0030	107	

Magnesium salts of rabeprazole (I), processes for preparing them, AB pharmaceutical compns. of the salts and their use in treatment or prevention of gastrointestinal ulcers are provided. Thus, the hemimagnesium salt of rabeprazole was prepared by several methods from either rabeprazole or its sodium salt and magnesium or magnesium salts or alkoxides.

Ι

IT 117976-89-3, Rabeprazole 117976-90-6, Rabeprazole sodium

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant for preparation of magnesium salt of rabeprazole for treatment or prevention of gastrointestinal ulcers)

RN 117976-89-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
H & O \\
N & \parallel \\
S - CH_2 & N \\
Me & O - (CH_2)_3 - OMe
\end{array}$$

RN 117976-90-6 CAPLUS

1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-CN pyridinyl]methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & \text{Me} \\
S - CH_2 & \text{NH}
\end{array}$$
O- (CH₂)₃-OMe

Na

```
L5 ANSWER 11 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN
```

ACCESSION NUMBER:

2004:550950 CAPLUS

DOCUMENT NUMBER:

141:111542

TITLE:

Solid states of pantoprazole sodium, processes for preparing them and processes for preparing known

pantoprazole sodium hydrates

INVENTOR(S):

Finkelstein, Nina; Wizel, Shlomit; Krochmel, Barnaba;

Braude, Viviana

PATENT ASSIGNEE(S):

Teva Pharmaceutical Industries Ltd., Israel; Teva

Pharmaceuticals USA, Inc.

SOURCE:

PCT Int. Appl., 90 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                         KIND
                               DATE
                                           APPLICATION NO.
                                                                   DATE
     -----
     WO 2004056804
                         A2
                                20040708
                                            WO 2003-US40668
                                                                   20031219
     WO 2004056804
                         A3
                                20040805
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2004177804
                               20040916
                                           US 2003-739272
                         A1
                                                                   20031219
PRIORITY APPLN. INFO.:
                                            US 2002-434445P
                                                                P 20021219
                                            US 2003-453836P
                                                                P 20030312
AR
     Crystalline pantoprazole sodium forms II, IV, V, VI, VIII, IX, X, XI, XII,
     XIII, XIV, XV, XVI, XVII, XVIII, XIX and XX, pantoprazole sodium solvates
     containing water, acetone, butanol, Me Et ketone, dimethylcarbonate, propanol
     and 2-methylpropanol, and amorphous pantoprazole sodium are disclosed. A
     method of treating gastroesophageal reflux disease comprising
     administering to a patient a pantoprazole sodium is claimed.
IT
     102625-70-7, Pantoprazole
     RL: RCT (Reactant); RACT (Reactant or reagent)
```

(of pantoprazole sodium and solvates thereof)
RN 102625-70-7 CAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

138786-67-1P, Pantoprazole sodium salt 164579-32-2P

699002-47-6P 718635-00-8P 718635-02-0P

718635-04-2P 718635-06-4P 718635-07-5P

718635-08-6P 718635-09-7P 718635-10-0P

718635-11-1P 718635-12-2P 718635-13-3P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(solid states of pantoprazole sodium, processes for preparing them and processes for preparing known pantoprazole sodium hydrates)

RN 138786-67-1 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 164579-32-2 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt, hydrate (2:3) (9CI) (CA INDEX NAME)

$$F_2CH-O$$

H
N
S
 CH_2
MeO
OMe

Na

●3/2 H₂O

RN 699002-47-6 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt, monohydrate (9CI) (CA INDEX

10/772,033

NAME)

Na

● н20

RN 718635-00-8 CAPLUS

CN 2-Propanone, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 138786-67-1 CMF C16 H15 F2 N3 O4 S . Na

Na

CM 2

CRN 67-64-1 CMF C3 H6 O

RN 718635-02-0 CAPLUS

CN 1-Butanol, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt (2:1) (9CI) (CFINDEX NAME)

CM 1

CRN 102625-70-7 CMF C16 H15 F2 N3 O4 S

CM 2

CRN 71-36-3 CMF C4 H10 O

 $_{\rm H_3C-CH_2-CH_2-CH_2-OH}$

RN 718635-04-2 CAPLUS

CN 2-Butanone, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 138786-67-1 CMF C16 H15 F2 N3 O4 S . Na

$$F_2CH-O$$
 N
 S
 S
 CH_2
 N
 N
 N
 N
 N

Na

CM 2

CRN 78-93-3 CMF C4 H8 O

RN 718635-06-4 CAPLUS

CN Carbonic acid, dimethyl ester, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt (9CI) (CA INDEX NAME)

10/772,033

CM 1

CRN 138786-67-1 CMF C16 H15 F2 N3 O4 S . Na

Na

CM 2

CRN 616-38-6 CMF C3 H6 O3

RN 718635-07-5 CAPLUS

CN 1-Propanol, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 102625-70-7 CMF C16 H15 F2 N3 O4 S

CM 2

CRN 71-23-8 CMF C3 H8 O

 ${\rm H_3C-CH_2-CH_2-OH}$

RN 718635-08-6 CAPLUS

CN 1-Propanol, 2-methyl-, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt (9CI) (CA INDEX

10/772,033

NAME)

CM 1

CRN 102625-70-7 CMF C16 H15 F2 N3 O4 S

CM 2

CRN 78-83-1 CMF C4 H10 O

$$^{{
m CH_3}}_{|}$$
 $^{{
m H_3C-CH-CH_2-OH}}_{|}$

RN 718635-09-7 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt, hydrate (9CI) (CA INDEX NAME)

$$F_2CH-O$$
 N
 $S-CH_2$
 N
 N
 N
 N
 N
 N

Na

●x H20

RN 718635-10-0 CAPLUS

CN 2-Butanone, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt, hydrate (9CI) (CA INDEX NAME)

CM 1

CRN 138786-67-1 CMF C16 H15 F2 N3 O4 S . Na

$$F_2CH-O$$
 N
 $S-CH_2$
 N
 N
OMe
 N

Na

CM 2

CRN 78-93-3 CMF C4 H8 O

RN 718635-11-1 CAPLUS

CN 2-Propanone, compd. with 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole sodium salt, hydrate (9CI) (CA INDEX NAME)

CM 1

CRN 138786-67-1 CMF C16 H15 F2 N3 O4 S . Na

Na

CM 2

CRN 67-64-1 CMF C3 H6 O

RN 718635-12-2 CAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-

pyridinyl)methyl]sulfinyl]-, sodium salt, dihydrate (9CI) (CA INDEX NAME)

Na

●2 H₂O

RN 718635-13-3 CAPLUS

1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-CN pyridinyl)methyl]sulfinyl]-, sodium salt, trihydrate (9CI) (CA INDEX NAME)

$$F_2CH-O$$
 N
 $S-CH_2$
 N
 N
 N
 N
 N

• Na

H20

ANSWER 12 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:534190 CAPLUS

DOCUMENT NUMBER:

141:94300

TITLE:

Preparation of the proton pump inhibitor rabeprazole

calcium as well as its alcohol solvates and its

hydrates

INVENTOR (S):

Kumar, Yatendra; Prasad, Mohan; Kumar, Neela Praveen

Ranbaxy Laboratories Limited, India

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 21 pp. CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent

FAMILY ACC. NUM. COUNT:

English

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004055001	A2	20040701	WO 2003-IB5614	20031216

```
WO 2004055001
                           Α3
                                  20041104
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
             OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                              IN 2002-DE1265
                                                                  A 20021216
     Calcium salts of rabeprazole and processes for preparing rabeprazole calcium,
     as well as its hydrates and alc. solvates, are presented along
     with spectral data. Rabeprazole calcium, its hydrates and alc.
     (e.g., methanol) solvates, which are proton pump inhibitors, are of use
     for the treatment or prevention of gastrointestinal ulcers,
     gastroesophageal reflux disorder, etc.
IT
     117976-89-3, Rabeprazole 117976-90-6, Rabeprazole sodium
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (in the preparation of the proton pump inhibitor rabeprazole calcium as well
        as its alc. solvates and its hydrates)
RN
     117976-89-3 CAPLUS
CN
     1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-
     pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)
```

$$\begin{array}{c|c} H & O \\ N & S - CH_2 \\ \hline & N \\ \hline & O - (CH_2)_3 - OMe \\ \end{array}$$

$$\begin{array}{c|c} N & O & Me \\ \hline & S-CH_2 & O-(CH_2)_3-OMe \\ \hline & N & N & O-(CH_2)_3-OMe \\ \hline \end{array}$$

Na

$$\begin{array}{c|c}
N & \text{Me} \\
S - CH_2 & \text{O} \\
N & N
\end{array}$$
O- (CH₂)₃ - OMe

●1/2 Ca

RN 714216-98-5 CAPLUS

CN 1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridinyl]methyl]sulfinyl]-, calcium salt, compd. with methanol (9CI) (CA INDEX NAME)

CM 1

CRN 117976-89-3 CMF C18 H21 N3 O3 S

$$\begin{array}{c|c}
H & O \\
N & S - CH_2
\end{array}$$
Me
$$\begin{array}{c|c}
O - (CH_2)_3 - OMe
\end{array}$$

CM 2

CRN 67-56-1 CMF C H4 O

 $_{\rm H_3C-OH}$

L5 ANSWER 13 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:525965 CAPLUS

DOCUMENT NUMBER:

141:76745

TITLE:

Method for the preparation of coated drugs and dietary

supplements that include substances with a

concentration gradient in the coating

INVENTOR(S):

Petereit, Hans-Ulrich; Meier, Christian; Roth, Erna

PATENT ASSIGNEE(S): Roehm GmbH & Co. Kg, Germany

SOURCE:

Ger. Offen., 14 pp.

DOCUMENT TYPE:

CODEN: GWXXBX Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

DE 10260919 A1 20040701 DE 2002-10260919 20021220

```
20040715
                                            WO 2003-EP11540
                                                                   20031018
    WO 2004058225
                          Α1
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
             TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                            DE 2002-10260919
                                                               A 20021220
     The invention concerns the preparation of coatings for drugs and dietary
AΒ
     supplements in a way that the concentration of the coating ingredients decrease
     or increase from the inner side of the coating to the outer side; the
     concentration gradient is achieved by spraying the components in form of solns.
    or dispersions from two or more nozzles; the components mix with each
     other during spraying and after evaporation a film is formed around the core.
     Cores are drug crystals, tablets, granules, pellets etc. Acid-sensitive
     substances can be coated with (meth)acrylate copolymers containing anionic
    groups in a way that the layers close to the cores contain neutralized
     anionic groups or a base; the outer layers contain increasing amts. of
     non-neutralized polymer or decreasing amts. of base. Similarly, base- or
     dye-sensitive substances can be coated by avoiding the critical component
     next to the core and increasing its concentration to the outer layer.
     first spraying fluid contained (g): Eudragit L30 D-55 300; 1N sodium
     hydroxide 250; water 1050. The second spraying fluid included (g):
     Eudragit L30 D-55 300; 1N sodium hydroxide 250; pigment suspension 750;
     water 300. The pigment suspension was composed of (q): talc 100; titanium
     dioxide 50; color pigment 50; polyethylene glycol 6000 50; trisodium
     acetate citrate 5.5 hydrate 62; antifoaming agent 1; water 687.
IT
    73590-58-6, Omeprazole 102625-70-7, Pantoprazole
     103577-45-3, Lansoprazole 117976-89-3, Rabeprazole
     119141-88-7, Esomeprazole
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (acid-sensitive, coating of; method for preparation of coated drugs and
       dietary supplements that include substances with a concentration gradient in
       coating)
RN
     73590-58-6 CAPLUS
CN
     1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-
     pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)
```

$$\begin{array}{c|c} & & & \\ &$$

RN 102625-70-7 CAPLUS
CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 103577-45-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 117976-89-3 CAPLUS

1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-CN pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
H & O \\
N & S - CH_2 \\
N & O - (CH_2)_3 - OMe
\end{array}$$

RN119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

ANSWER 14 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:203830 CAPLUS DOCUMENT NUMBER:

140:245456

TITLE:

Amorphous hydrates of esomeprazole magnesium

and a process for their preparation

INVENTOR (S):

Reddy, Manne Satyanarayana; Kumar, Muppa Kishore;

Purandhar, Koilkonda; Sreenath, Keshaboina

PATENT ASSIGNEE(S):

Reddy's Laboratories Limited, India; Reddy's

Laboratories, Inc.

SOURCE:

PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ---------WO 2004020436 20040311 WO 2003-US27177 20030828 A1 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2004167173 A1 20040826 US 2003-651306 20030828 PRIORITY APPLN. INFO.: IN 2002-MA638 A 20020830

OTHER SOURCE(S): MARPAT 140:245456

A trihydrate of esomeprazole magnesium in the form of an amorphous solid AΒ is prepared and described for use as a gastric acid inhibitor.

İT 161796-78-7, Esomeprazole sodium

RL: RCT (Reactant); RACT (Reactant or reagent)

(process for preparation of amorphous hydrates of esomeprazole magnesium for use in reducing gastric acid secretion)

RN 161796-78-7 CAPLUS

1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-CN pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

• Na

ΙT 119141-88-7P, Esomeprazole

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(process for preparation of amorphous hydrates of esomeprazole magnesium for use in reducing gastric acid secretion)

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethy]-2pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 15 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

5

ACCESSION NUMBER:

2004:165728 CAPLUS

DOCUMENT NUMBER:

141:355528

TITLE:

Solid state characterization of new pantoprazole

sodium hydrate forms and its amorphous form

AUTHOR(S):

Kotar-Jordan, B.; Grcman, M.; Ograjsek, N.; Vrecer, F. KRKA, dd., Novo mesto, R+D, Novo mesto, 8501, Slovenia

CORPORATE SOURCE: SOURCE:

Farmacevtski Vestnik (Ljubljana, Slovenia) (2003),

54 (Spec. Issue), 411-412

CODEN: FMVTAV; ISSN: 0014-8229 Slovensko Farmacevtsko Drustvo

DOCUMENT TYPE:

Journal

LANGUAGE:

PUBLISHER:

English

AB Hemihydrate and dihydrate, and amorphous forms of pantoprazole sodium were isolated and characterized by differential scanning calorimetry, thermogravimetric anal., Fourier transform-IR spectrometry and x-ray powder diffraction, solid state 13C NMR spectrometry, and dynamic vapor sorption isotherms.

IT 138786-67-1, Pantoprazole sodium 718635-12-2
774583-03-8

RL: ANT (Analyte); PRP (Properties); ANST (Analytical study) (solid state characterization of pantoprazole sodium hydrate forms and its amorphous form)

RN 138786-67-1 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 718635-12-2 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt, dihydrate (9CI) (CA INDEX NAME)

Na

2 H₂O

RN 774583-03-8 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2pyridinyl)methyl]sulfinyl]-, sodium salt, hydrate (2:1) (9CI) NAME)

$$F_2 \text{CH-O} \underbrace{\begin{array}{c} \text{O} \\ \text{N} \\ \text{N} \\ \text{N} \\ \end{array}}^{\text{OMe}} \underbrace{\begin{array}{c} \text{OMe} \\ \text{OMe} \\ \text{N} \\ \text{N} \\ \end{array}}^{\text{OMe}}$$

Na

●1/2 H₂O

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 16 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:165727 CAPLUS

DOCUMENT NUMBER:

141:337371

TITLE:

Characterization of two pantoprazole sodium

hydrates

AUTHOR(S):

Zupancic, V.; Jordan, Kotar B.; Grcman, M.; Ograjsek,

N.; Vrecer, F.

CORPORATE SOURCE:

Product supply, Novo mesto, Krka d.d., Novo mesto,

8501, Estonia

SOURCE:

Farmacevtski Vestnik (Ljubljana, Slovenia) (2003),

54 (Spec. Issue), 409-410

CODEN: FMVTAV; ISSN: 0014-8229

PUBLISHER:

Slovensko Farmacevtsko Drustvo Journal

DOCUMENT TYPE: LANGUAGE:

English

The aim of this study was to characterize 2 hydrates of

pantoprazole sodium, i.e., monohydrate and sesquihydrate by modem anal. techniques such as DSC, Ft-IR and Raman spectroscopic techniques. The

ΙT

monohydrateis thermodynamically less stable than the sesquihydrate.

164579-32-2, Pantoprazole sodium sesquihydrate 699002-47-6

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(characterization of pantoprazole sodium hydrates)

RN 164579-32-2 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt, hydrate (2:3) (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & O \\ \hline N & S - CH_2 \\ \hline N & MeO \end{array}$$

Na

●3/2 H₂O

RN 699002-47-6 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]-, sodium salt, monohydrate (9CI) (CA INDEX NAME)

Na

● H₂O

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 17 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:117124 CAPLUS

DOCUMENT NUMBER:

140:169642

TITLE:

Preparation of the novel (-)-pantoprazole magnesium

dihydrate

INVENTOR(S):

Kohl, Bernhard; Mueller, Bernd; Sturm, Ernst; Hummel,

Rolf-Peter; Simon, Wolfgang-Alexander; Kromer,

Wolfgang; Postius, Stefan; Hanauer, Guido; Huber,

Reinhard

PATENT ASSIGNEE(S):

Altana Pharma AG, Germany

SOURCE:

Ger. Offen., 4 pp. CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATEN	NT NO.			KIN		DATE		1	APPL	ICAT	ION	NO.		D	ATE	
DE 10	DE 10234617			A1 20040212			DE 2002-10234617						20020729			
CA 24	193326			AA		2004	0212	(CA 2	003-	2493	326		2	0030	726
WO 20	0040131	.26		A1		2004	0212	V	NO 2	003-	EP82	69		2	0030	726
V	V: AE,	AL,	AU,	BA,	BR,	CA,	CN,	CO,	DZ,	EC,	GE,	HR,	ID,	IL,	IN,	IS,
	JP,	KR,	LT,	LV,	MA,	MK,	MX,	NO,	ΝZ,	PH,	PL,	SG,	TN,	UA,	US,	VN,
	YU,	ZA,	ZW													
F	RW: AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,
	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	RO,	SE,
	SI,	SK,	TR													
EP 15	527066			A1		2005	0504	E	EP 2	003-	7478	66		2	0030	726
F	R: AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		SI,														
US 20	0042489	40		A1		2004	1209	τ	JS 2	004-	4896	59		2	0040	315
PRIORITY A	APPLN.	INFO	.:					I	DE 2	002-	1023	4617	1	A 2	0020	729
										002-				_	0021	206
								F	EP 2	003-	1241	1	1	A 2	0030	530
								V	VO 2	003-1	EP82	69	1	W 2	0030	726

AΒ The invention concerns the preparation of (-)-pantoprazole magnesium salt and its hydrate, especially the dihydrate for the treatment of stomach and intestinal diseases. For the preparation of (-)-pantoprazole magnesium 20.2 q (-)-pantoprazole were dissolved in sodium hydroxide and filtrated followed by the addition of a 6.32 g magnesium chloride hexahydrate aqueous solution The

(-)-pantoprazole magnesium salt was isolated and recrystd. from methanol to obtain (-)-pantoprazole magnesium dihydrate.

TΤ 102625-70-7, Pantoprazole

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of novel (-)-pantoprazole magnesium dihydrate)

RN 102625-70-7 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

ANSWER 18 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:19893 CAPLUS

DOCUMENT NUMBER:

140:59642

TITLE:

preparation of almost anhydrous lansoprazole from its

solvate and/or hydrate

INVENTOR(S):

Aihara, Kiyoshi; Hiroshige, Eiko; Yokoqoshi, Kiyonori

Permachem Asia, Ltd., Japan Jpn. Kokai Tokkyo Koho, 7 pp.

PATENT ASSIGNEE(S):

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004002230	A2	20040108	JP 2002-160105	20020531
PRIORITY APPLN. INFO.:			JP 2002-160105	20020531
			_	

OTHER SOURCE(S):

CASREACT 140:59642

Almost anhydrous lansoprazole (I, already know as antiulcer agent) is prepared by dissolving solvate and/or hydrate of I in solvent, crystallizing by aqueous alkali, and drying at low temperature Thus, I hydrate (H2O content 1.5%) was dissolved in DMF, treated with ammonia at pH 9, filtered, and dried at 40° for 12 h to give white I crystals, which contained 0.04% H2O.

TΤ 207790-96-3 637744-12-8

> RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)

(dehydration and/or desolvation of lansoprazole by crystallization by aqueous

alkali and low-temperature drying)

RN 207790-96-3 CAPLUS

Ethanol, compd. with 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-CN pyridinyl]methyl]sulfinyl]-1H-benzimidazole (1:1), monohydrate (9CI) (CA INDEX NAME)

1 CM

CRN 103577-45-3 CMF C16 H14 F3 N3 O2 S

$$\begin{array}{c|c}
N & Me \\
S - CH_2 & O - CH_2 - CF_3
\end{array}$$

CM

CRN 64-17-5 CMF C2 H6 O

 H_3C-CH_2-OH

RN 637744-12-8 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2pyridinyl]methyl]sulfinyl]-, monohydrate (9CI) (CA INDEX NAME)

● H₂O

ΙT 103577-45-3P, Lansoprazole

RL: PUR (Purification or recovery); PREP (Preparation) (dehydration and/or desolvation of lansoprazole by crystallization by aqueous

alkali and low-temperature drying)

103577-45-3 - CAPLUS RN

1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-CN pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & Me \\
S - CH_2 & Me
\end{array}$$

$$\begin{array}{c|c}
N & O - CH_2 - CF_3
\end{array}$$

ANSWER 19 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:900584 CAPLUS

DOCUMENT NUMBER: TITLE:

140:321598

Interactions of Omeprazole and Precursors with beta-Cyclodextrin Host Molecules

AUTHOR (S):

Braga, Susana S.; Ribeiro-Claro, Paulo; Pillinger, Martyn; Goncalves, Isabel S.; Fernandes, Ana C.; Pereira, Florbela; Romao, Carlos C.; Correia, Pedro

Brito; Teixeira-Dias, Jose J. C.

CORPORATE SOURCE:

CICECO, Department of Chemistry, University of Aveiro,

Aveiro, 3810-193, Port.

SOURCE:

Journal of Inclusion Phenomena and Macrocyclic

Chemistry (2003), 47(1-2), 47-52 CODEN: JIPCF5; ISSN: 1388-3127

PUBLISHER:

Kluwer Academic Publishers

DOCUMENT TYPE:

Journal

LANGUAGE: English

 β -Cyclodextrin (β -CD) was mixed with omegrazole and some of its precursors in aqueous or water/ethanol solns., and the resulting crystalline products have been characterized by elemental anal., thermogravimetry, powder X-ray diffraction (XRD), FTIR and 13C CP MAS NMR spectroscopy. In the case of 2-chloromethyl-4-methoxy-3,5-dimethylpyridine·HCl, it was found that the solid product always consisted of pure $\beta\text{-CD}$ hydrate. On the other hand, a 2:1 (host-to-guest) inclusion complex was obtained between β -CD and 2-methoxy-2mercaptobenzimidazole. The thioether intermediate 5-methoxy-2-[(3,5dimethyl-4-methoxy-2-pyridine) methylthio]-1H-benzimidazole and its sulfoxide derivative (omeprazole) both formed 1:1 inclusion complexes with $\beta\text{-CD}.$ Powder XRD indicates that the crystal packing of $\beta\text{-CD}$ host mols. is herringbone-type for the 2:1 complex, and channel-type for

the 1:1 complexes. Ab initio calcns. were carried out to investigate the host-guest interactions. It was found that the interaction with the pyridine fragment is wholly repulsive, due to the presence of several ring substituents. On the other hand, the inclusion of the benzimidazole fragment is energetically favored, but highly dependent on the orientation of the substituent methoxy group.

IT 678172-86-6 678172-87-7

RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)

(interactions of omeprazole and precursors with $\beta\text{-cyclodextrin}$ host mols.)

RN 678172-86-6 CAPLUS

CN β-Cyclodextrin, compd. with 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]thio]-1H-benzimidazole (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 73590-85-9 CMF C17 H19 N3 O2 S

CM 2

CRN 7585-39-9 CMF C42 H70 O35

Absolute stereochemistry.

PAGE 1-A

Н

PAGE 2-A

RN 678172-87-7 CAPLUS

CN β-Cyclodextrin, compd. with 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 73590-58-6 CMF C17 H19 N3 O3 S

$$\begin{array}{c|c} & & & \\ &$$

CM 2

CRN 7585-39-9 CMF C42 H70 O35

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

ΙT 73590-58-6 73590-85-9

RL: PRP (Properties)

(interactions of omeprazole and precursors with $\beta\text{-cyclodextrin}$

host mols.)

73590-58-6 CAPLUS RN

1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-CN

pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN73590-85-9 CAPLUS

1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-CN

pyridinyl)methyl]thio] - (9CI) (CA INDEX NAME)

REFERENCE COUNT:

34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 20 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:154421 CAPLUS

DOCUMENT NUMBER: 138:187772

TITLE: Method for the preparing crystals of

2-[(2-pyridinylmethyl)thio]-1H-benzimidazole

hydrates

INVENTOR (S): Loebermann, Hartmut; Caster, Karl-Heinz

PATENT ASSIGNEE(S): Gruenenthal G.m.b.H., Germany

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

KIND PATENT NO. DATE APPLICATION NO. DATE ----WO 2003016301 Α1 20030227 WO 2002-EP8867 20020808

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AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
     DE 10140492
                                20030814
                                             DE 2001-10140492
                          A1
                                                                    20010817
     CA 2457576
                          AA
                                20030227
                                             CA 2002-2457576
                                                                    20020808
     EP 1421076
                                20040526
                                             EP 2002-758447
                                                                    20020808
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     US 2004158072
                          A1
                                20040812
                                             US 2004-772033
                                                                    20040204
PRIORITY APPLN. INFO.:
                                             DE 2001-10140492
                                                                 Α
                                                                    20010817
                                             WO 2002-EP8867
                                                                 W
                                                                    20020808
OTHER SOURCE(S):
                         CASREACT 138:187772; MARPAT 138:187772
GΙ
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$$\begin{bmatrix} R^{2} & & & & \\ R^{1} & & & & \\ R^{2} & & & & \\ R^{3} & & & & \\ R^{6} & & & & \\ R^{1} & & & & \\ R^{2} & & & \\ R^{3} & & & \\ R^{2} & & & \\ R^{3} & & & \\ R^{2} & & & \\ R^{3} & & & \\ R^{4} & & & \\ R^{5} & & & \\ R^{6} & & & \\ R^{1} & & & \\ R^{2} & & \\ R^{3} & & \\ R^{2} & & \\ R^{3} & & \\ R^{2} & & \\ R^{3} & & \\ R^{4} & & \\ R^{5} & & \\ R^{5$$

AB Title compds. [I; R1-R3 = H, alkyl, cycloalkyl, fluoroalkyl, alkoxy; R4, R5 = H, alkyl, (methylene)cycloalkyl, alkoxycarbonyl, alkoxy, fluoroalkoxy, fluoroalkyl, carboxyalkyl; R6 = H, alkyl; x = 0.5-2], were prepared by reacting non-hydrated II (R4, R5 as above) with reactive III (R1-R3 and R6 as above) in the presence of a base. Isolation of I results by partially removal of organic solvent which is mixable with H2O followed by crystallization with 55 weight% H2O at <40°. Thus NaOH in EtOH was treated with 2-mercapto-5-methoxybenzimidazole followed by reflux with 2-chloromethyl-3,5-dimethyl-4-methoxypyridine hydrochloride for 14 h. The reaction mixture was crystallized with H2O at 25° to give 95% crystals of 5-methoxy-2-[(3,5-dimethyl-4-methoxypyridin-2-yl)methylthio]-1H-benzimidazole hydrate having a purity of 99.7%.

IT 73590-85-9P, Pyrmetazole

RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)

(method for preparing crystals of (pyridinylmethylthio)benzimidazole hydrates)

RN 73590-85-9 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2pyridinyl) methyl] thio] - (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ \hline & \text{N} \\ & \text{NH} \end{array} \\ \text{S-CH}_2 \\ \hline & \text{N} \\ \text{Me} \\ \end{array}$$

ΙT 108928-02-5P

> RL: PUR (Purification or recovery); PREP (Preparation) (method for preparing crystals of (pyridinylmethylthio)benzimidazole

RN 108928-02-5 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2pyridinyl)methyl]thio]-, hydrochloride (9CI) (CA INDEX NAME)

●x HCl

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 21 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2002:934781 CAPLUS

DOCUMENT NUMBER:

138:396134

TITLE:

On the inhibitory action of 29 drugs having side

effect gynecomastia on estrogen production

AUTHOR (S):

Satoh, Takashi; Itoh, Shinji; Seki, Toshio; Itoh,

Shungo; Nomura, Norikazu; Yoshizawa, Itsuo

CORPORATE SOURCE:

Hokkaido College of Pharmacy, Otaru, Hokkaido,

047-0264, Japan

SOURCE:

Journal of Steroid Biochemistry and Molecular Biology

(2002), 82(2-3), 209-216

CODEN: JSBBEZ; ISSN: 0960-0760

PUBLISHER:

Elsevier Science Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE: English

To examine the influence on aromatase and sulfatase pathways in estrogen pool by drugs reported to cause gynecomastia as the side effect, 29 ethical drugs were incubated with human placental microsomes as an enzyme source. The percent inhibition of drugs on aromatase pathway was obtained by sum of the velocity consts. of two products, estrone (E1) and estradiol (E2) from testosterone (T) as the substrate, and that on sulfatase pathway was obtained as the velocity constant of production of E1 from estrone sulfate (EIS). Although several drugs including ketoconazole showed a significant inhibition effect on aromatase pathway at their non-clin. over-dose concentration

ΙT

CN

(100 µM), no influence on the inhibition was observed in any drugs at their approx. therapeutic concentration (1 µM). However, several drugs including spironolactone gave the product ratio (E2/E1) having higher value than that of the control, the result means spironolactone inhibits the conversion of E2 to E1. No inhibitory effect of the drugs tested on estrogen production from E1S (sulfatase pathway) was confirmed. The results suggest the possibility that the tested drugs known to cause gynecomastia have no inhibitory effect essentially on aromatase and sulfatase pathways. 73590-58-6, Omeprazole 103577-45-3, Lansoprazole

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibitory action of drugs having a side effect of gynecomastia on estrogen production)

RN73590-58-6 CAPLUS

> 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & O & Me \\ \hline N & S - CH_2 & N \\ \hline MeO & Me \\ \end{array}$$

RN 103577-45-3 CAPLUS

1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-CN pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 22 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2002:271983 CAPLUS

DOCUMENT NUMBER:

136:299722

TITLE:

Pharmaceuticals containing alkoxybenzimidazoles for

INVENTOR(S):

inhibition of gastric acid secretion

Whittle, Robert R.; Sancilio, Frederick D.; Stowell, Grayson Walker; Jenkins, Douglas John; Whittall, Linda

В.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S., 45 pp., Cont.-in-part of U.S. 6,262,085.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6369087	B1	20020409	US 2000-645145	20000824
US 6262085	B1	20010717	US 2000-519976	20000307

US :	2002103232	A1	20020801	US	2002-57659		20020125
US (6444689	B2	20020903				
US :	2003096845	A1	20030522	US	2002-189659		20020703
US (6667321	B2	20031223				
US 2	2003225135	A1	20031204	US	2003-431019		20030507
US (6667323	B2	20031223				
US 2	2003225136	A1	20031204	US	2003-434259		20030508
US (6706737	B2	20040316				
US (6653329	B1	20031125	US	2003-439865		20030516
US :	2003225137	A1	20031204	US	2003-439438		20030516
US (6667324	B2	20031223				
us :	2004157887	A1	20040812	US	2004-769021		20040202
PRIORITY	APPLN. INFO.:			US	1999-150878P	P	19990826
				US	2000-519976	A2	20000307
				US	2000-645145	Α1	20000824
				US	2002-57659	A1	20020125
				US	2002-189659	A1	20020703
				US	2003-434259	A1	20030508

OTHER SOURCE(S):

MARPAT 136:299722

GT

AΒ I, including omeprazole and its enantiomers, are disclosed by the invention, along with pharmaceutically acceptable salts, solvates, hydrates, or combinations optionally in combination with the 5-R-substituted analog, that are useful for inhibiting gastric acid secretion in mammals. Pharmaceutical formulations and methods of making and using such compds. are also disclosed. I (where $Sx = chiral\ S$ atom comprising at least 1 of the diastereoisomers, R = alkoxy; R1 = H, alkyl, halo, carboalkoxy, alkoxy, alkanoyl; R2 = H or alkyl; and R3, R4, and R5 =H, alkyl, alkoxy, or alkoxyalkoxy, wherein when R4 is alkoxy and R3 and R5 are not H, the alkyl substituent of such alkoxy group is selected from the group consisting of at least one of the diastereomers in which the alkoxy group is above the chiral plane and the alkoxy group is below the chiral plane, with some provisions). The compds. may be used to treat disorders such as duodenal ulcer, H. pylori infection, and gastric ulcer. Pure 6-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1Hbenzimidazole (II) was separated in solution and characterized. Enteric-coated tablets contained 225 mg II.

73590-58-6, 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5dimethyl-2-pyridinyl)methyl]sulfinyl]RL: BSU (Biological study, unclassified); FMU (Formation, unclassified);

PRP (Properties); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)

(pharmaceuticals containing alkoxybenzimidazoles for inhibition of gastric acid secretion)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

IT 95510-70-6, 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5dimethyl-2-pyridinyl)methyl]sulfinyl]-,sodiumsalt 119141-88-7, 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2pyridinyl) methyl] sulfinyl] - 119141-89-8, 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-161796-77-6, 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt 161796-78-7, 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2pyridinyl)methyl]sulfinyl]-, sodium salt RL: FMU (Formation, unclassified); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses) (pharmaceuticals containing alkoxybenzimidazoles for inhibition of qastric acid secretion) RN 95510-70-6 CAPLUS CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 119141-88-7 CAPLUS

CN lH-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 119141-89-8 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 161796-77-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Na

RN 161796-78-7 CAPLUS

CN lH-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Na

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT:

153 THERE ARE 153 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 23 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2002:185616 CAPLUS

DOCUMENT NUMBER:

136:252482

TITLE:

Preparation of aqueous clear solution dosage forms

with bile acids

INVENTOR(S):

Yoo, Seo Hong

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 35 pp., Cont.-in-part of U.S.

6,251,428. CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002031558	A1	20020314	US 2001-778154	20010205
US 6251428	В1	20010626	US 1999-357549	19990720
US 2003186933	A1	20031002	US 2002-309603	20021204
PRIORITY APPLN. INFO.:			US 1998-94069P F	19980724
			US 1999-357549 A	2 19990720
			US 2000-180268P F	20000204
_			US 2001-778154 A	.3 20010205

AB Compns. for pharmaceutical and other uses comprise clear aqueous solns. of bile acids which do not form any detectable ppts. over selected ranges of pH values of the aqueous solution The compns. comprise (i) water, (ii) a bile acid component in the form of a bile acid, bile acid salt, or a bile acid conjugated with an amine by an amide linkage; and (iii) either or both an aqueous soluble starch conversion product and an aqueous soluble non-starch polysaccharide. The composition remains in solution without forming a precipitate over a

range of pH values and, according to one embodiment, remains in solution for

10/772,033

all pH values obtainable in an aqueous system. The composition may further contain

a pharmaceutical compound, such as insulin, heparin, bismuth compds., amantadine and rimantadine. For example, solution dosage forms that did not show any precipitation at any pH were prepared containing ursodeoxycholic acid (UDCA) 22

g, 1N NaOH 75 mL, chenodeoxycholic acid (CDCA) 3 g, maltodextrin 875 g, bismuth citrate 4 g, citric acid or lactic acid as needed, and purified water to make 1 $\rm L$.

IT 73590-58-6, Omeprazole 103577-45-3, Lansoprazole

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of stable aqueous solns. containing bile acids for therapy)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 103577-45-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{Me} \\
 & \text{N} \\
 & \text{N} \\
 & \text{N}
\end{array}$$

$$\begin{array}{c}
 & \text{O} \\
 & \text{CH}_2 \\
 & \text{N}
\end{array}$$

$$\begin{array}{c}
 & \text{O} \\
 & \text{CH}_2 \\
 & \text{CH}_2
\end{array}$$

L5 ANSWER 24 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2002:87150 CAPLUS

DOCUMENT NUMBER:

136:123699

TITLE:

Preparation of pharmaceutical compositions containing

ion-exchange resins compositions

INVENTOR(S):

Hughes, Lyn

PATENT ASSIGNEE(S):

Rohm and Haas Company, USA

SOURCE:

Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
EP 1175914	A2 20020130	EP 2001-306420	20010726
EP 1175914	A3 20020502		
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,
IĒ, SI, LT,	LV, FI, RO		
US 2002032245	A1 20020314	US 2001-885881	20010620
JP 2002060350	A2 20020226	JP 2001-227720	20010727

PRIORITY APPLN. INFO.:

US 2000-221024P P 20000727

AB A rapid release resin composition is described wherein the drug is anisotropically distributed throughout the resin material. Thus, 0.5 g indomethacin and 1.5 g an acrylic anion exchange resin with tertiary amine functionality (Amberlite IRA 67) and a weight capacity between 5.8 and 6.2 mequiv./g, in its fully hydrated state were mixed in a 25-mL vial. Water (6 g) was added to the mixture, the vial was closed and the mixture shaken. After 2 h the indomethacin disappeared and the ion exchange resin was yellow. The water was drained to give the wet resinate.

IT 103577-45-3, Lansoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of pharmaceuticals containing ion-exchange resins compns.)

RN 103577-45-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & \text{Ne} \\
S - CH_2 & \text{Ne} \\
N & N
\end{array}$$

$$\begin{array}{c|c}
O - CH_2 - CF_3 \\
O - CH$$

L5 ANSWER 25 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:875245 CAPLUS

DOCUMENT NUMBER:

136:11182

TITLE:

Dry blend of methoxybenzimidazole derivs. for oral

dosage forms

INVENTOR (S):

Whittle, Robert R.; Sancilio, Frederick D.; Stowell, Grayson Walker; Jenkins, Douglas John; Whittall, Linda

B. USA

PATENT ASSIGNEE(S):

SOURCE:

U.S., 39 pp., Cont.-in-part of U.S. 6,262,085.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
US 6326384	B1	20011204	US 2000-645148		20000824
US 6262085	B1	20010717	US 2000-519976		20000307
PRIORITY APPLN. INFO.:			US 1999-150878P	P	19990826
			US 2000-519976	A2	20000307

OTHER SOURCE(S): MARPAT 136:11182

The present invention provides dry blend pharmaceutical formulations in unit dosage forms comprising per dosage unit one or more active pharmaceutical ingredients or pharmaceutically acceptable salts, solvates, hydrates, or combinations thereof wherein the ratio of said one or more active pharmaceutical ingredients in said formulations is essentially the same as the ratio of said active pharmaceutical ingredients in the corresponding, non-formulated drug substance and, wherein said formulations in unit dosage form are adapted for oral administration in a form of a capsule or a tablet. The active pharmaceutical ingredient is 4-methoxy-3,5-dimethyl-2-pyridinyl or one or more pharmaceutically acceptable salts, solvates, hydrates, or combinations thereof, in pure form or essentially free of 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole. For example, a tablet

formulation was manufactured by complexing 5(6)-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole (I) with hydroxypropyl- β -cyclodextrin (HP β CD) in solution and spraying the solution onto lactose. The spray on lactose material was then blended with excipients and compressed into core tablets. The formulation contained I 20.0 mg, HP β CD 80.0 mg, lactose 68.7 mg, magnesium stearate 0.4 mg, and colloidal silica 0.4 mg per tablet. Tablets were coated to a 4.5% total solids weight gain with an Opadry White coating solution as a subcoat. After drying, a 10% total solids weight gain from an Eudragit L 30 or D-55 coating solution was applied as an enteric coat.

IT 73590-58-6P, Omeprazole 95510-70-6P 119141-88-7P

119141-89-8P 161796-77-6P 161796-78-7P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(oral dosage forms containing blend of methoxybenzimidazole derivs. for treatment of gastric acid-related diseases)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 95510-70-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 119141-89-8 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 161796-77-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Na

RN 161796-78-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Na

IT 372518-59-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(oral dosage forms containing blend of methoxybenzimidazole derivs. for

treatment of gastric acid-related diseases)

RN 372518-59-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, magnesium salt, octahydrate (9CI) (CA INDEX NAME)

●1/2 Mg

●4 H₂O

REFERENCE COUNT:

147 THERE ARE 147 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L5 ANSWER 26 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:851149 CAPLUS

DOCUMENT NUMBER:

136:5990

TITLE:

Process for producing crystal of optically active

2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-

pyridyl]methyl]sulfinyl]benzimidazole

INVENTOR(S): Hashimoto, Hideo; Maruyama, Hideaki

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 73 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT NO.					KIND DATE			;	APPL	ICAT	DATE						
WO	2001	0878	74			20011122			1	WO 2	001-	20010515					
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	KZ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ;	NO,	NZ,	PL,	PT,	RO,
		RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,
		VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM			
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
AU	2001	0567	32		A5		2001	1126	7	AU 2	001-	5673	2		2	0010	515
JP	2002	0377	В3		A2		2002	0206	,	JP 20	001-	1446	35		2	00109	515
JP	3374	314			B2		2003	0204									
CA	2409	044			AA		2002	1114	(CA 20	001-	2409	044		2	00109	515
JP	2002	3385	57		A2		2002	1127		JP 20	001-	1456	88		2	00109	515
JP	2003	05531	72		A2		2003	0226		JP 20	002-3	2294	02		2	00109	515
ΕP	1293	507			A1		2003	0319	1	EP 20	001-	9301	31		20	00109	515

and

The

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2003153766 A1 20030814 US 2002-275334 20021107 PRIORITY APPLN. INFO.: JP 2000-141670 A 20000515

JP 2001-144635 A3 20010515 WO 2001-JP4014 W 20010515

OTHER SOURCE(S): CASREACT 136:5990

AB Described is a process for producing crystals of (R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]-sulfinyl]benzimidazole [(R)-I].n'H2O (wherein n' is about 0 to about 0.1) or of a salt thereof, characterized by subjecting a solution or dispersion in an organic solvent of (R)-2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridyl]methyl]sulfinyl]benzimidazole .nH2O (wherein n is about 0.1 to about 1.0) to crystallization to crystallize out the target compound During examining various methods of preparing

(R) - and (S) - I, it was found that there exist specific crystal forms for (R) - and (S) - I which are different from crystal forms of the sulfone derivative When these isomers are crystallized in these specific crystal forms,

surprisingly the sulfone derivative, which is normally difficult to remove, is readily removed to give the desired isomer with very high optical purity. Thereby, this process is a simple process by which an optically active sulfoxide derivative can be efficiently and industrially mass-produced in high yield while attaining an extremely high enantiomer excess. (R)- and (S)-I possess antiulcer, anti-Helicobacter pylori, stomach-acid secretion inhibitory, and mucus membrane-protecting activity and are useful as antiulcer agents (no data). Thus, 0.747 L titanium isopropoxide was added to a mixture of 4.5 kg 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2pyridyl]methyl]thio]benzimidazole (1.89% water content), 22 L PhMe, 25 q H2O, 0.958 L (+)-tartaric acid di-Et ester at 50-60° and stirred at the same temperature for 30 min, followed by adding 0.733 L diisopropylethylamine at room temperature and then cumene hydroperoxide at -5° to 5°, and the resulting mixture was stirred at -5° to 5° for 1.5 h and treated with 17 L 30% sodium thiosulfate to decompose the residual cumene hydroperoxide. The organic layer was separated

successively treated with H2O 4.5, heptane 13.5, tert-Bu Me ether 18, and heptane 27 L, and stirred at .apprx.10° for crystallization The precipitated crystals were separated and washed with 4 L tert-Bu Me ether-PhMe (4:1) to give wet crystals of (R)-I containing the sulfone derivative by 0.90% and no sulfide and other isomer with optical purity of 100% ee. A suspension of the latter crystals in 20 L acetone was added dropwise to a mixture of 7 L acetone and 34 L water and stirred at .apprx.10° and the precipitated crystals were separated and washed with a mixture of 4 L acetone and 12 L water to give wet crystals of (R)-I containing no sulfone and sulfide derivative and other isomer with optical purity of 100% ee. The latter wet crystals were dissolved in 45 L EtOAc and 3 L H2O and the organic layer was separated, filtered

to remove insol. matter, treated with 0.2 L Et3N, concentrated to .apprx.7 L, and treated with 2.3L MeOH and then with .apprx.12.5% aqueous NH3 (23 L, .apprx.50°) and 22 L tert-Bu Me ether (.apprx.50°). The organic layer was separated while saving the water layer and those in the following procedure, and treated with .apprx.12.5% aqueous NH3, followed by separating the organic layer, and this procedure was repeated one more time.

separated water layers were combined, treated with 22 L EtOAc, adjusted to pH .apprx.8 by adding dropwise AcOH, followed by separating the organic layer and extracting the water layer with 11 L EtOAc. The organic layers were combined, washed with 11 L .apprx.20% aqueous NaCl, treated with 0.2 L Et3N, concentrated under reduced pressure, treated with 5 L acetone, and concentrated under reduced

pressure. The concentrate was dissolved in 9 L acetone and the solution was added

dropwise to a mixture of 4.5 L acetone and 22.5 L H2O, followed by adding dropwsie 18 L water to the resulting mixture The resulting mixture was stirred at .apprx.10° and the precipitated crystals were separated and successively washed with a cold 1:3 mixture of acetone and water (3 L) and then 12 L water to give wet crystals of (R)-I containing no sulfone and sulfide derivative and other isomer with optical purity of 100% ee. The latter wet crystals were dissolved in 32 L EtOAc, followed by separating the water layer, and the organic layer was concentrated under reduced pressure to .apprx.14 L, treated with 36 L EtOAc and 270 g activated charcoal, stirred, and filtered to remove the activated charcoal. The filtrate was concentrated under reduced pressure to .apprx.14 L, followed by adding 90 L heptane to the concentrate at .apprx.40° and stirring the resulting mixture at .apprx.40° for 30 min., and the precipitated crystals were separated, washed with a 1:8 mixture of EtOAc and heptane (6 L), and dried to give 3.4 kg (R)-I containing no sulfone and sulfide derivative and other isomer with optical purity of 100% ee, which had specific peaks in powder X-ray diffraction anal.

IT 103577-40-8

CN

RN

RL: RCT (Reactant); RACT (Reactant or reagent)
 (asym. oxidation; process for producing optically active
 [[[methyl(fluoroethoxy)pyridyl]methyl]sulfinyl]benzimidazole in
 specific crystal forms by crystallization)

RN 103577-40-8 CAPLUS

1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2pyridinyl]methyl]thio]- (9CI) (CA INDEX NAME)

$$S-CH_2$$
 N
 $O-CH_2-CF_3$

IT 138530-94-6P 138530-95-7P

RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(process for producing optically active [[[methyl(fluoroethoxy)pyridyl] methyl]sulfinyl]benzimidazole in specific crystal forms by crystallization) 138530-94-6 CAPLUS

CN 1H-Benzimidazole, 2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 138530-95-7 CAPLUS

CN lH-Benzimidazole, 2-[(S)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

10/772,033

Absolute stereochemistry. Rotation (-).

IT 374782-41-9P, (R)-2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)-2 pyridyl]methyl]sulfinyl]benzimidazole hydrate
374782-42-0P, (S)-2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)-2 pyridyl]methyl]sulfinyl]benzimidazole hydrate
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(process for producing optically active [[[methyl(fluoroethoxy)pyridyl] methyl]sulfinyl]benzimidazole in specific crystal forms by crystallization)

RN 374782-41-9 CAPLUS

CN 1H-Benzimidazole, 2-[(R)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-, hydrate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

●x H2O

RN 374782-42-0 CAPLUS

CN 1H-Benzimidazole, 2-[(S)-[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-, hydrate (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

●x H₂O

ANSWER 27 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:838793 CAPLUS DOCUMENT NUMBER:

137:57492

TITLE:

Blood donors on medication: are deferral periods

necessary?

AUTHOR (S):

Stichtenoth, Dirk O.; Deicher, Helmuth R. G.; Frolich,

Jurgen C.

CORPORATE SOURCE:

Institute of Clinical Pharmacology, Medizinische Hochschule Hannover, Hannover, 30623, Germany

SOURCE:

European Journal of Clinical Pharmacology (2001),

57(6-7), 433-440

CODEN: EJCPAS; ISSN: 0031-6970

PUBLISHER:

Springer-Verlag

Journal English

DOCUMENT TYPE: LANGUAGE:

Drugs and their metabolites in transfused blood components may cause effects in the recipient. If the disorder being treated is not to be regarded as an exclusion criterion from blood donation, donors on medication should be deferred for a period consistent with the drug's pharmacokinetics. Peak plasma drug concns. of ≤3% of the therapeutic concentration were regarded to be safe for the recipient of a blood product. For teratogenic drugs a much lower safety level of <0.000001% has been proposed. For the calcn. of deferral periods, both the type of blood component to be prepared and the drug's pharmacokinetics were considered. For drugs with known teratogenic risks, a deferral period of 28 plasma-elimination half-lives is suggested. For nonteratogenic drugs, a simple, conservative approach could be based on waiting for 5 plasma-elimination half-lives, thus reaching the required 3% safety level. If, however, the type of blood component to be prepared is also considered, a more differentiated approach appears to be appropriate: for blood components containing ≤50 mL plasma from a single donor, donor medication may be disregarded because of the high dilution in the recipient's plasma volume, whereas for blood components with higher plasma contents (250 mL on average) from a single donor on medication the 3% safety level will be achieved by observing the deferral period of 5 plasma-elimination half-lives. A guideline for 191 drugs and drug classes is presented.

ΙT 73590-58-6, Omeprazole 102625-70-7, Pantoprazole 103577-45-3, Lansoprazole

RL: ADV (Adverse effect, including toxicity); BUU (Biological use, unclassified); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(waiting period before transfusion of blood products prepared from blood of humans taking various drugs, including)

RN73590-58-6 CAPLUS

CN

1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 102625-70-7 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 103577-45-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 28 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

23

ACCESSION NUMBER:

2001:828927 CAPLUS

DOCUMENT NUMBER:

135:362587

TITLE:

Cyclodextrin-containing pharmaceutical formulations

for benzimidazole derivatives

INVENTOR(S):

Whittle, Robert R.; Sancilio, Frederick D.; Stowell, Grayson Walker; Jenkins, Douglas John; Whittall, Linda

B.; Meyer, Glenn Alan

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S., 36 pp., Cont.-in-part of U.S. 6,202,085.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE		
				-			
US 6316020	B1	20011113	US 2000-629587		20000731		
US 6262085	B1	20010717	US 2000-519976		20000307		
PRIORITY APPLN. INFO.:			US 1999-150878P	P	19990826		
			US 2000-519976	A 2	20000307		

OTHER SOURCE(S):

MARPAT 135:362587

Pharmaceutical compns. comprise a benzimidazole derivative as an active ingredient or a pharmaceutically acceptable salt, solvate, hydrate, or their combinations with at least one cyclodextrin and at least one pharmaceutically acceptable carrier, diluent, or excipient. For example, to a 50 mL beaker about 1 g of 5(6)-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole was added to 30 mL of methylene chloride. Addnl. 5(6)-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole was added to the resulting solution until a suspension of the material was formed. The solution was stirred for approx. 10 min, and then filtered through a 0.45 µm PTFE or Nylon filter. The resulting saturated solution was placed in a beaker, covered.

and stored under refrigerated conditions (approx. 5°) until crystals formed (between 1-2 days). The identity of the title compound was confirmed by single crystal x-ray diffraction and/or Raman spectroscopy.

The resulting material was determined to contain about 84-88% (weight/weight) of the

6-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1 H-benzimidazole and about 12-16% (weight/weight) (I) of the 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1 H-benzimidazole (II). I and II were formulated in various dosage forms, such as tablets, capsules, enteric-coated tablets, and solns. for inhibiting gastric acid secretion. The formulations contained a cyclodextrin, e.g. hydroxypropyl β -cyclodextrin, in a drug to cyclodextrin ratio of 1:4-1:20 to increase drug solubility

IT 73590-58-6 95510-70-6 119141-88-7 119141-89-8 161796-77-6 161796-78-7 372518-59-7

RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(crystallization of benzimidazole derivs. for formulations containing cyclodextrin)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & O & Me \\ \hline N & S - CH_2 & N \\ \hline Me & Me \\ \end{array}$$

RN 95510-70-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & O & Me \\ \hline N & S - CH_2 & N \end{array}$$

Na

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 119141-89-8 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 161796-77-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Na

RN 161796-78-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Na

RN 372518-59-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, magnesium salt, octahydrate (9CI) (CA INDEX NAME)

●1/2 Mg

●4 H₂O

REFERENCE COUNT:

147 THERE ARE 147 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 29 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:809023 CAPLUS

DOCUMENT NUMBER:

135:348907

TITLE:

Pyridylmethylsulfinylbenzimidazole derivatives with

improved bioavailability

INVENTOR(S):

Whittle, Robert R.; Sancilio, Frederick D.; Stowell,

Grayson Walker; Jenkins, Douglas John; Whittall, Linda B.; Meyer, Glenn Alan

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S., 36 pp., Cont.-in-part of U.S. 6,262,085.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6312712	B1	20011106	US 2000-628840	20000731
US 6262085	B1	20010717	US 2000-519976	20000307

PRIORITY APPLN. INFO.:

US 1999-150878P

P 19990826

US 2000-519976

A2 20000307

OTHER SOURCE(S):

MARPAT 135:348907

IT 73590-58-6P 95510-70-6P

RL: BPR (Biological process); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (pyridylmethylsulfinylbenzimidazole derivs. with improved bioavailability)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 95510-70-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

IT 119141-88-7P 119141-89-8P 161796-77-6P 161796-78-7P

RL: BYP (Byproduct); PREP (Preparation)
(pyridylmethylsulfinylbenzimidazole derivs. with improved bioavailability)

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 119141-89-8 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 161796-77-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Na\

RN 161796-78-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Na

REFERENCE COUNT:

147 THERE ARE 147 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 30 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:808258 CAPLUS

DOCUMENT NUMBER:

135:348904

TITLE:

Pharmaceutical unit dosage form containing 6-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole

INVENTOR(S):

Whittle, Robert R.; Sancilio, Frederick D.; Stowell, Grayson Walker; Jenkins, Douglas John; Whittall, Linda

B.; Meyer, Glenn Alan; Fontana, Steven A.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S., 37 pp., Cont.-in-part of U.S. 6,262,085.

CODEN: USXXAM

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6312723	В1	20011106	US 2000-629634	20000731
US 6262085	B1	20010717	US 2000-519976	20000307
PRIORITY APPLN. INFO.:			US 1999-150878P	P 19990826
			US 2000-519976	A2 20000307

OTHER SOURCE(S):

MARPAT 135:348904

AB Pharmaceutical formulations, in oral unit dosage forms, have one or more active ingredients, namely 6-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole (I), or pharmaceutically acceptable salts, solvates, hydrates, or combinations combined with at least one cyclodextrin. Examples are given for preparation of I and formulations of I which include hydroxypropyl β-cyclodextrin.

IT 73590-58-6P

RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(pharmaceutical unit dosage form containing 6-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & O & Me \\ \hline N & S - CH_2 & N \\ \hline MeO & Me \\ \end{array}$$

IT 161796-77-6P 161796-78-7P

RL: BYP (Byproduct); PREP (Preparation)

(pharmaceutical unit dosage form containing 6-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole)

RN 161796-77-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Na

RN 161796-78-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Na

IT 95510-70-6P

RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(pharmaceutical unit dosage form containing 6-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-lH-benzimidazole)

RN 95510-70-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

Na

REFERENCE COUNT:

147 THERE ARE 147 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L5 ANSWER 31 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:713109 CAPLUS

DOCUMENT NUMBER: 135:262242

TITLE: Fast dissolving orally consumable films containing an

ion exchange resin as a taste masking agent

INVENTOR(S): Bess, William S.; Kulkarni, Neema; Ambike, Suhas H.;

Ramsay, Michael Paul

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	CENT 1	NO.	_		KIND DATE				j	APP:	LICAT		DATE				
	WO	2001	0701	94			A1 20010927			ī	WO :	2001-	US21	 92		2	0010	123
		W:	ΑE,	AG,	AL,	AU,	ΒA,	BB,	BG,	BR,	BZ	, CA,	CN,	CR,	CU,	CZ,	DM,	DZ,
												, JP,						
												, PL,						
						•			•			, KG,	•	•	•	•	•	,
		RW.										, TZ,						CV
												, LU,						
																	IK,	Dr,
	C A	2402										, MR,						
		2402										2001-						
	EΡ	1267	829			A1		2003	0102	1	EP :	2001-	9599	12		2	0010	123
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR						
	BR	2001										2001-	9378			2	0010	123
	JP	2003	5274	10		T2		2003	0916		JP :	2001-	5683	92		2	0010	123
		5209				Α						2001-					0010	
	ZA	2002										2002-					0020	
		2002										2002-						
PRIO		APP							0,20			2000-					0000	
												2000- 2001-						
AB	Phy	rsiol	aco	cent;	able	filr	na	incl	udino			o fil						

AB Physiol. acceptable films, including edible films, are disclosed. The films include a water soluble film-forming polymer, such as pullulan, and a taste masked pharmaceutically active agent, such as dextromethorphan. The taste masking agent is preferably a sulfonated polymer ion exchange resin comprising polystyrene cross-linked with divinylbenzene, such as Amberlite. Methods for producing the films are also disclosed. For example, an antitussive film was prepared in accordance with the following procedure: (A) uncoated dextromethorphan hydrobromide was dissolved with mixing in the water, while maintaining the temperature at 75°, Amberlite

resin was then mixed into the water with heating at 70-80°, and heating was stopped, water lost to evaporation was replaced, and the potassium sorbate and sweeteners were then added to the composition with mixing to form Preparation A. (B) The film-forming ingredients (i.e., xanthan gum, locust bean gum, carrageenan and pullulan) were mixed in a sep. container to form Preparation B. (C) Preparation B was slowly added to Preparation A with rapid mixing,

followed by overnight mixing at a reduced rate to provide Preparation C. (D)
The menthol was dissolved with mixing in the alc. in a sep. container.
The Physcool was then dissolved with mixing therein. Monoammonium
glycyrrhizinate, Polysorbate 80, Atmos 300 and flavors were then added to
the mixture and mixed to enhanced uniformity to form Preparation D. (E)
Preparation

D, glycerin and mannitol were added to Preparation C with thorough mixing to provide Preparation E. Preparation E was poured on a mold and cast to form a film

of a desired thickness at room temperature. The film was dried under warm air and cut to a desired dimension (dictated by, e.g., dosage and mouthfeel) for taste testing. The active film had a pleasing appearance and taste.

IT 73590-58-6, Omeprazole 103577-45-3, Lansoprazole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(fast dissolving orally consumable films containing ion exchange resin as taste masking agent)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 103577-45-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{Me} \\
 & \text{NH} & \text{S-CH}_2 \\
 & \text{NH} & \text{N}
\end{array}$$

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 32 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:560068 CAPLUS

DOCUMENT NUMBER:

135:142236

TITLE:

Dry blend pharmaceutical formulations

INVENTOR(S):

Whittle, Robert R.; Sancilio, Frederick D.; Stowell, Grayson Walker; Jenkins, Douglas John; Whittall, Linda

B.; Fontana, Steven A.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S., 39 pp., Cont.-in-part of U.S. Ser. No. 519,976.

CODEN: USXXAM

10/772,033

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

. a

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE		
					-			
	US 6268385	B1	20010731	US 2000-645146		20000824		
	US 6262085	B1	20010717	US 2000-519976		20000307		
PRIOR	ITY APPLN. INFO.:			US 1999-150878P	P	19990826		
				US 2000-519976	A2	20000307		

OTHER SOURCE(S):

MARPAT 135:142236

AB Pharmaceutical formulations comprise 1 or more active ingredients or their salts, solvates, hydrates, or combinations, wherein the ratio of the active ingredients in the formulations is essentially the same as the ratio of the active ingredients in the corresponding nonformulated drug. Thus, pure 6-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)-methyl]sulfinyl]-1H-benzimidazole was obtained by saturating (5)6-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)-methyl]sulfinyl]-1H-benzimidazole in MeOH solution and equilibrating for 4 days. Thus, capsules contained drug 300, lactose 700, microcryst. cellulose 40, HPC 62, disodium hydrogen phosphate 2, and water qs.

IT 73590-58-6P

RL: BPR (Biological process); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (dry blend pharmaceutical formulations)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

IT 95510-70-6P 161796-77-6P 161796-78-7P

RL: PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(dry blend pharmaceutical formulations)

RN 95510-70-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 161796-77-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Na

RN 161796-78-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Na

IT 119141-88-7P 119141-89-8P

RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (dry blend pharmaceutical formulations)

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 119141-89-8 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-

pyridinyl) methyl] sulfinyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT:

146 THERE ARE 146 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 33 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:338762 CAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

134:362292

TITLE:

Methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile

Farr, Spencer

PATENT ASSIGNEE(S):

Phase-1 Molecular Toxicology, USA

SOURCE:

PCT Int. Appl., 222 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	PATENT NO.					KIND DATE			APPLICATION NO.						DATE			
						-		-										
WO 2	001	0329	28		A2		20010510			WO 2000-US30474					20001103			
WO 2	2001	0329	28		A 3		2002	0725										
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	
		HU,	ID,	IL,	IN,	IS,	JΡ,	KΕ,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	
		SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VN,	
		YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM					
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	
		ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
PRIORITY	APP	LN.	INFO	. :					1	JS 1:	999-	1653	98P	:	P 19	9991	105	
							US 2000-196571P			71P	P 20000411							

AB The invention discloses methods, gene databases, gene arrays, protein arrays, and devices that may be used to determine the hypersensitivity of individuals to a given agent, such as drug or other chemical, in order to prevent toxic side effects. In one embodiment, methods of identifying hypersensitivity in a subject by obtaining a gene expression profile of multiple genes associated with hypersensitivity of the subject suspected to be hypersensitive, and identifying in the gene expression profile of the subject a pattern of gene expression of the genes associated with hypersensitivity are disclosed. The gene expression profile of the subject may be compared with the gene expression profile of a normal individual and a hypersensitive individual. The gene expression profile of the subject that is obtained may comprise a profile of levels of mRNA or cDNA. The gene expression profile may be obtained by using an array of nucleic acid probes for the plurality of genes associated with hypersensitivity. The expression of the genes predetd. to be associated with hypersensitivity is directly related to prevention or repair of toxic damage at the tissue, organ or system level. Gene databases arrays and apparatus useful for identifying hypersensitivity in a subject are also disclosed.

IT 73590-58-6, Omeprazole 103577-45-3, Lansoprazole
117976-89-3, Rabeprazole

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(methods of determining individual hypersensitivity to a pharmaceutical agent

from gene expression profile)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 103577-45-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 117976-89-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
H & O \\
N & S - CH_2
\end{array}$$
Me
$$\begin{array}{c|c}
O - (CH_2)_3 - OMe
\end{array}$$

5 ANSWER 34 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:152673 CAPLUS

DOCUMENT NUMBER:

134:212723

TITLE:

Pharmaceuticals containing alkoxybenzimidazoles for

inhibition of gastric acid secretion

INVENTOR(S):

Whittle, Robert R.; Sancilio, Frederick D.; Stowell,

Grayson Walker; Jenkins, Douglas John; Whittall,

Linda; Meyer, Glenn Alan

PATENT ASSIGNEE(S):

Applied Analytical Industries, Inc., USA

SOURCE:

PCT Int. Appl., 137 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	KIND DATE			APPLICATION NO.						DATE							
												·					
WO													23363				
	W :	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BE	3, BO	G, BI	R, BY,	ΒZ,	CA,	CH,	CN,
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES	5, F	[, GI	3, GD,	GE,	GH,	GM,	HR,
		HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KF	, KI	R, K2	Z, LC,	LK,	LR,	LS,	LT,
		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX	(, M2	Z, NO), NZ,	PL,	PT,	RO,	RU,
		SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TF	?, T	г, та	Z, UA,	ŪĠ,	US,	UZ,	VN,
		YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	ME	, RI	J, TJ	I, TM				
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	Z, T2	z, uc	, ZW,	ΑT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	II	, L	J, MO	NL,	PT,	SE,	BF,	ВJ,
													, TD,				
US	6262												976		2	0000	307
CA	2382	867			AA		2001	0301		CA	2000	0-238	2867		2	0000	825
													737				
	7776						2004										
BR	2000	0141	45		Α		2002	0514		BR	2000)-141	.45		2	0000	825
	1206									20000825							
	R:	AT,											LU,				
							RO,					,	,		,	,	,
JP	2003					-	-	-				-518	698		2	0000	825
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																0020	
PRIORITY								0.20					878P				
				•									976			0000	
													3363			0000	
OTHER SO	OURCE	(S):			MARI	PAT	134:	2127			2000	, 052	.5505		2		ردن

GΙ

AB I, including omeprazole and its enantiomers, are disclosed by the invention, along with pharmaceutically acceptable salts, solvates, hydrates, or combinations optionally in combination with the 5-R-substituted analog, that are useful for inhibiting gastric acid secretion in mammals. Pharmaceutical formulations and methods of making and using such compds. are also disclosed. I (where Sx = chiral S atom comprising at least 1 of the diastereoisomers, R = alkoxy; R1 = H, alkyl, halo, carboalkoxy, alkoxy, alkanoyl; R2 = H or alkyl; and R3, R4, and R5 =H, alkyl, alkoxy, or alkoxyalkoxy, wherein when R4 is alkoxy and R3 and R5 are not H, the alkyl substituent of such alkoxy group is ≥1). The compds. may be used to treat disorders such as duodenal ulcer, H. pylori infection, and gastric ulcer. Pure 6-methoxy-2-[[(4-methoxy-=3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-1H-benzimidazole (II) was separated in solution characterized. Enteric-coated tablets contained 225 mg II.

IT 73590-58-6

RL: BPR (Biological process); BSU (Biological study, unclassified); FMU (Formation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process); USES (Uses)

(pharmaceuticals containing alkoxybenzimidazoles for inhibition of gastric acid secretion)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

IT 95510-70-6 119141-88-7 119141-89-8 161796-77-6 161796-78-7

RL: FMU (Formation, unclassified); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); USES (Uses)

(pharmaceuticals containing alkoxybenzimidazoles for inhibition of gastric acid secretion)

RN 95510-70-6 CAPLUS

CN lH-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 119141-88-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 119141-89-8 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-

pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 161796-77-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(R)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Na

RN 161796-78-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

• Na

73590-58-6DP, magnesium complex, tetrahydrate
119141-88-7DP, magnesium complex

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(pharmaceuticals containing alkoxybenzimidazoles for inhibition of gastric acid secretion)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-

pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 119141-88-7 CAPLUS

1H-Benzimidazole, 5-methoxy-2-[(S)-[(4-methoxy-3,5-dimethyl-2-CN pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 35 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN L5

5

ACCESSION NUMBER:

2000:875749 CAPLUS

DOCUMENT NUMBER:

134:33001

TITLE:

Alkali metal and alkaline-earth metal salts of

acetaminophen

INVENTOR(S):

Ohannesian, Lena A.; Nadig, David; Higgins, John D.,

III; Rey, Max; Martellucci, Stephen A.

PATENT ASSIGNEE(S):

McNeil-PPC, Inc., USA

SOURCE:

U.S., 10 pp., Cont.-in-part of U.S. Ser. No. 987,210,

abandoned. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.					KIND DATE			APPLICATION NO.						DATE				
						_									_			
US	6160	020			Α		2000	1212	1	US 1	998-	1002	84		1	9980	619	
WO	WO 9966919				A1 19991229			1	WO 1999-US13064					19990609				
	W:	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	
		KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	
		MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	
		TT,	UA,	UG,	UΖ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM
	RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	
		ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	
		CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG						
AU	AU 9943380			A1	:	2000	0110	AU 1999-43380					19990609					
PRIORITY	APP	LN.	INFO	. :					1	JS 1	996-	7711	76	1	B2 1	99612	220	
									1	JS 1	997-	9872	10	1	32 19	99712	209	
									Ţ	JS 1	998-	1002	84	7	A 19	980	519	

WO 1999-US13064 W 19990609

AB Isolated salts of acetaminophen are disclosed. Alkali metal and alkaline-earth metal salts of acetaminophen are formed by reacting the free acid of acetaminophen with the corresponding metal hydroxide and then immediately isolating the resulting salt. These salts have been found to be more water soluble and less bitter in taste than the free acid form of acetaminophen. The isolated salts may also be combined with other active ingredients. A tablet contained calcium acetaminophen 368.23, chlorpheniramine maleate 2, microcryst. cellulose 520.77, silica 4.5, and Mg stearate 4.5 mg.

IT 73590-58-6, Omeprazole

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(oral compns. containing acetaminophen metal salt and other actives)

RN 73590-58-6 CAPLUS

1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-CN pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & O & Me \\ \hline N & S - CH_2 & N \\ \hline MeO & Me \\ \end{array}$$

REFERENCE COUNT:

30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CAPLUS COPYRIGHT 2005 ACS on STN ANSWER 36 OF 44

ACCESSION NUMBER:

2000:227470 CAPLUS

DOCUMENT NUMBER:

132:255811

TITLE:

Fast dissolving orally consumable films

INVENTOR(S):

Leung, Sau-Hung Spence; Leone, Robert S.; Kumar, Lori

Dee; Kulkarni, Neema; Sorg, Albert F.

PATENT ASSIGNEE(S):

Warner-Lambert Company, USA

SOURCE:

PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.			KIND DATE				APPLICATION NO.						DATE				
						-											
WO 2000018365 A2				2000	0406	,	WO 1999-US22115						19990923				
WO	2000	0183	65		A3		2000	1116									
	W :	ΑE,	AL,	ΑU,	BA,	BB,	BG,	BR,	CA,	CN,	CR,	CU,	CZ,	DM,	EE,	GD,	GE,
		HR,	HU,	ID,	IL,	IN,	IS,	JΡ,	ΚP,	KR,	LC,	LK,	LR,	LT,	LV,	MG,	MK,
		MN,	MX,	NO,	ΝZ,	ΡL,	RO,	SG,	SI,	SK,	SL,	TR,	TT,	TZ,	UA,	UZ,	VN,
		YU,	ZA,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM					
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG				
CA	CA 2339353 AA 2000			0000406 CA 1999-2339353							19990923						
ΑU	AU 9960593 A1 2			20000417 AU 1999-60593							19990923						
ΑU	7718	62			B2		20040401										
ΕP	EP 1115372 A2			2001	0718		EP 1999-969668					19990923					
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO										

JP 2	2002525306	T2	20020813	JP	2000-571886		19990923
EE 2	200100186	Α	20020815	EE	2001-186		19990923
ZA 2	2001001706	Α	20030528	ZA	2001-1706		20010228
NO 2	2001001476	Α	20010322	NO	2001-1476		20010322
US 2	2005031675	A1	20050210	US	2004-941193		20040915
PRIORITY	APPLN. INFO.:			US	1998-101798P	P	19980925
				US	1999-395104	A1	19990914
				WO	1999-US22115	W	19990923
				US	2003-418368	A1	20030417

AB Physiol. acceptable films, including edible films, are disclosed. The films include a water soluble film-forming polymer such as pullulan. Edible films are disclosed that include pullulan and antimicrobially effective amts. of the essential oils thymol, Me salicylate, eucalyptol and menthol. The edible films are effective at killing the plaque-producing germs that cause dental plaque, gingivitis and bad breath. The film can also contain pharmaceutically active agents. Methods for producing the films are also disclosed.

IT 73590-58-6, Omeprazole 103577-45-3, Lansoprazole

RL: BUU (Biological use, unclassified); MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(fast dissolving orally consumable films for killing plaque-producing qerms)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 103577-45-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

L5 ANSWER 37 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 200

2000:59104 CAPLUS

DOCUMENT NUMBER:

132:117524

TITLE:

SOURCE:

Anti-Helicobacter pylori drugs containing

fluoroquinolonecarboxylic acids and their uses

INVENTOR(S):

Sato, Kenichi

PATENT ASSIGNEE(S):

Daiichi Seiyaku Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

GΙ

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000026296	A2	20000125	JP 1998-198204	19980714
PRIORITY APPLN. INFO.:			JP 1998-198204	19980714
OTHER SOURCE(S):	MARPAT	132:117524		

$$\begin{array}{c|c}
R^2 & O \\
\hline
 & CO_2H \\
\hline
 & R^3 & R^4
\end{array}$$

AB The drugs, useful for prevention and treatment of gastritis, peptic ulcer, gastric cancer, etc., contain fluoroquinolonecarboxylic acids I [R1 = (un)substituted C3-6 cycloalkyl; R2 = H, NH2; R3 = substituted or condensed pyrrolidinyl group (11 specific groups are given); R4 = halo, C1-6 alkyl, C1-6 alkoxy; R1 and R4 may be bonded together to form OCH2CHMe], their salts, or their hydrates as active ingredients. The drugs may be used in combination with proton pump inhibitors. MIC50 and MIC90 of (-)-7-[7(S)-amino-5-azaspiro[2,4]heptan-5-yl]-8-chloro-6-fluoro-1-[(1R,2S)-cis-2-fluoro-1-cyclopropyl]-1,4-dihydro-4-oxoquinolone-3-carboxylic acid (II) against H. pylori were 0.1 and 0.2 μg/mL, resp., 25.0 and 50.0 μg/mL, resp., for pantoprazole. The additive effect of II and pantoprazole was also examined

IT 73590-58-6 102625-70-7 103577-45-3 117976-89-3

Ι

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(combination use with; preparation of fluoroquinolonecarboxylic acids as anti-Helicobacter pylori drugs for gastritis and peptic ulcer and gastric cancer)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 102625-70-7 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

103577-45-3 CAPLUS RN

1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-CN pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 117976-89-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[4-(3-methoxypropoxy)-3-methyl-2pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

ANSWER 38 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1999:819235 CAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

132:54898

TITLE:

Pharmaceutical composition containing a salt of

acetaminophen and at least one other active ingredient Ohannesian, Lena A.; Nadig, David; Higgins, John D.,

III; Rey, Max; Martellucci, Stephen A.

PATENT ASSIGNEE(S):

Mcneil-PPC, Inc., USA

SOURCE:

PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

FAMILY ACC. NUM. COUNT:

English

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. ----------**A1** 19991229 WO 1999-US13064 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,

CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 1998-100284 20001212 19980619 US 6160020 Α 20000110 AU 1999-43380 AU 9943380 Α1 19990609 PRIORITY APPLN. INFO.: US 1998-100284 A 19980619 US 1996-771176 B2 19961220 US 1997-987210 B2 19971209 WO 1999-US13064 W 19990609

AB This invention relates to pharmaceutical compns. comprising an alkali or alkaline-earth metal salt of acetaminophen and at least one other active ingredient selected from the group consisting of analgesics, decongestants, expectorants, antitussives, antihistamines, gastrointestinal agents, diuretics, bronchodilators and mixts. thereof. The acetaminophen salts have both improved aqueous solubility and a less bitter taste than the free acid form of acetaminophen. A tablet contained acetaminophen calcium salt 368.23, chlorpheniramine maleate 2, microcryst. cellulose 520.77, Cab-O-Sil M5 4.5, and Mg stearate 4.5 mg.

IT **73590-58-6**, Omeprazole

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical compns. containing acetaminophen salts and other drugs) 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 39 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1999:758297 CAPLUS

DOCUMENT NUMBER:

132:325917

TITLE:

RN

Sorption/desorption study of PP/K-10 ethanol and

ethanol-water solvate with DVS

AUTHOR(S):

Gartner, A.; Pavli, V.; Vrecer, F.

CORPORATE SOURCE: SOURCE:

R & D Div., KRKA, Novo mesto, 8501, Slovenia Farmacevtski Vestnik (Ljubljana) (1999), 50(Pos.

Stev.), 345-346

CODEN: FMVTAV; ISSN: 0014-8229

PUBLISHER:

LANGUAGE:

Slovensko Farmacevtsko Drustvo Journal

DOCUMENT TYPE:

English

AB The results of DVS (Dynamic Vapor Sorption) study of the sorption/desorption properties of two PP/K-10 (2-[[[2(1H)-benzimidazolyl]sulfinyl]methyl]3-methyl-4-(2,2,2-trifluoroethoxy)pyridine) solvates, i.e. ethanolate and ethanolate-hydrate, are presented and the possible mechanism of water sorption and desorption of both solvates is discussed. In the structure of both desolvated products, mols. of the solvent are trapped in the structure of the crystals. Water with higher activity began supplanting the solvent mols. in the structure and total mass was decreasing. In the sec. cycle this phenomenon disappeared and both products showed nearly the same isotherms. The resemblance of sorption/desorption behavior of both solvates was attributed to the similarity in structure of both solvates and likeness of

the sorption and desorption mechanisms. The similarity of structures was confirmed by x-ray diffraction, DSC and TG anal.

IT 266306-09-6, PP/K-10 ethanolate hydrate

266356-21-2, PP/K-10 ethanolate

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(sorption/desorption of solvates of benzimidazole derivative PP/K-10)

RN 266306-09-6 CAPLUS

CN Ethanol, compd. with 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazole, hydrate (9CI) (CA INDEX NAME)

CM 1

CRN 103577-45-3

CMF C16 H14 F3 N3 O2 S

CM 2

CRN 64-17-5 CMF C2 H6 O

 H_3C-CH_2-OH

RN 266356-21-2 CAPLUS

CN Ethanol, compd. with 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]-lH-benzimidazole (9CI) (CA INDEX NAME)

CM 1

CRN 103577-45-3

CMF C16 H14 F3 N3 O2 S

$$\begin{array}{c|c}
N & Me \\
S - CH_2 - Me \\
N & N
\end{array}$$

$$\begin{array}{c|c}
O - CH_2 - CF_3 \\
O - CH_2 - CF_3
\end{array}$$

CM 2

CRN 64-17-5

CMF C2 H6 O

H3C-CH2-OH

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ANSWER 40 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
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1999:722856 CAPLUS

DOCUMENT NUMBER:

131:332110

TITLE:

Treatment of celiac disease Sjostrom, Hans; Noren, Ove Kobenhavns Universitet, Den.

PATENT ASSIGNEE(S):

INVENTOR(S):

PCT Int. Appl., 79 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIND DATE				APPLICATION NO.						DATE			
_	9956 9956				A2		1999		1	WO 1	999-	DK25	5		19	9990	506
WO		ΑE,	AL,	AM,		AT,	1999 AU,	AZ,									
		HR,	HU,	ID,	IL,	IN,	DK, IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,
							MK, SL,										
	RW:	•		•	•	•	KG, SD,	•	•	- •			BE,	CH,	CY,	DE,	DK,
							IE, ML,						SE,	BF,	ВJ,	CF,	CG,
EP 1075267		A2 20010214			EP 1999-917810						19990506						
	R:	AT, IE,		CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
PRIORITY	APP	LN.	INFO	.:										1		9980: 9980:	

WO 1999-DK255 W 19990506 AB The present invention relates to a method of treating celiac disease comprising interfering with the deamidation of at least one glutamine residue in a gliadin or glutenin mol. This may be provided by prohibiting or interfering with the deamidation of at least one glutamine residue by derivation of at least one glutamine residue in a gliadin or glutenin mol. in wheat flour by a chemical or enzymic deamidation of gluten followed by chemical or enzymic derivation of the generated carboxyl group(s). In a further aspect, the invention relates to a method of interfering with the deamidation of at least one glutamine residue in a gliadin or glutenin mol. and thereby treating celiac disease, the method comprising administering, to a patient having or suspected of having celiac disease, at least one of the following substances: (a) a substance which is capable of increasing the pH in the gastroduodenal tract of a subject, e.g. an antacidum, an anticholinergic agent, H2-receptor antagonists or a proton pump inhibitor, (b) a substance which is capable of eliminating deamidating bacteria in the gastroduodenal tract of a subject, e.g. an antibiotic or antimicrobial agent, and/or (c) a substance which is capable of interfering with the effect of at least one deamidating enzyme in the gastroduodenal tract of a subject.

IT 73590-58-6, Omeprazole 102625-70-7, Pantoprazole 103577-45-3, Lansoprazole

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(proton pump inhibitor, celiac disease treatment with; treatment of

celiac disease by interfering with deamidation of glutamine residue of gliadins or glutenins in wheat flour)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 102625-70-7 CAPLUS

CN 1H-Benzimidazole, 5-(difluoromethoxy)-2-[[(3,4-dimethoxy-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$F_2CH-O$$
 N
 S
 S
 CH_2
 N
 N
 N
 N
 N

RN 103577-45-3 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & Me \\
S - CH_2 & O - CH_2 - CF_3
\end{array}$$

L5 ANSWER 41 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1999:649443 CAPLUS

DOCUMENT NUMBER:

131:291265

TITLE:

Omeprazole salt hydrate as antacid and its

preparation

INVENTOR (S):

Yan, Yimin; Ge, Jilin; Tu, Yongrui

PATENT ASSIGNEE(S):

Changzhou Pharmaceutical Factory No.4, Peop. Rep.

China

SOURCE:

Faming Zhuanli Shenqing Gongkai Shuomingshu, 33 pp.

CODEN: CNXXEV

DOCUMENT TYPE:

Patent

LANGUAGE:

Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1136564	Α	19961127	CN 1995-111640	19950525
CN 1042423	В	19990310		
PRIORITY APPLN. INFO.:			CN 1995-111640	19950525

AB Omeprazole salt hydrate as antacid and its preparation are claimed.

As an example, omeprazole sodium salt hydrate is prepared by passing omeprazole in alc. through a D201 resin column which is pretreated with NaCl solution, NaOH solution and then water, introducing NaOH in aqueous alc.

solution from the bottom part with pressure and collecting an active ingredient fraction from the upper part of the column, concentrating, treating with 2 vols. of organic solvent to precipitate, filtering, and drying to obtain omeprazole sodium salt hydrate.

IT 73590-58-6, Omeprazole

RL: RCT (Reactant); RACT (Reactant or reagent)
 (omeprazole salt hydrate as antacid and its preparation)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

IT 95510-70-6P, Omeprazole sodium salt 95510-71-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(omeprazole salt hydrate as antacid and its preparation)

RN 95510-70-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & O & Me \\ \hline N & S - CH_2 & N \\ \hline MeO & Me \\ \end{array}$$

Na

RN 95510-71-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, potassium salt (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

IT 246860-60-6P 246860-61-7P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(omeprazole salt hydrate as antacid and its preparation)

RN 246860-60-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, sodium salt, hydrate (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & O & Me \\ \hline N & S - CH_2 & N \end{array}$$

Na

●x H₂O

RN 246860-61-7 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]-, potassium salt, hydrate (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

Вк

●x H20

L5 ANSWER 42 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1997:724482 CAPLUS

DOCUMENT NUMBER:

127:362541

TITLE:

Solid state characterization of K-1252

AUTHOR (S):

Kotar-Jordan, B.; Vrecer, F.

CORPORATE SOURCE:

KRKA, d.d., Novo Mesto, R&D Division, Novo Mesto,

8501, Slovenia

SOURCE:

Farmacevtski Vestnik (Ljubljana) (1997), 48 (Pos.

Stev.), 288-289

CODEN: FMVTAV; ISSN: 0014-8229

PUBLISHER:

Slovensko Farmacevtsko Drustvo

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Two polymorphs, 2 hydrates (ratios 4:3 and 4:1) and solvates of K-1252 [2-[[[3-methyl-4-(2,2,2,-trifluoroethoxy)-2-pyridyl]methyl]thio]-1H-benzimidazole] were isolated and characterized by DSC, thermogravimetric anal., FT-IR, powder diffractometry and NMR.

IT 103577-40-8, K 1252 198544-90-0 198544-91-1

198544-92-2 198544-93-3

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(solid state characterization of K-1252 benzimidazole)

RN 103577-40-8 CAPLUS

CN lH-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]thio]- (9CI) (CA INDEX NAME)

$$S-CH_2$$
 Me
 $O-CH_2-CF_3$

RN 198544-90-0 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]thio]-, hydrate (4:3) (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ \hline & \text{N} \\ & \text{NH} \end{array}$$

\bullet 3/4 H₂O

RN 198544-91-1 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]thio]-, hydrate (4:1) (9CI) (CA INDEX NAME)

●1/4 H₂O

RN 198544-92-2 CAPLUS

CN 2-Propanol, compd. with 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]thio]-1H-benzimidazole (9CI) (CA INDEX NAME)

CM 1

CRN 103577-40-8 CMF C16 H14 F3 N3 O S

$$\begin{array}{c|c} H \\ N \\ N \\ S - CH_2 \\ \hline \\ Me \\ O - CH_2 - CF_3 \\ \end{array}$$

CM 2

CRN 67-63-0 CMF C3 H8 O

RN 198544-93-3 CAPLUS

CN Ethanol, compd. with 2-[[[3-methyl-4-(2,2,2-trifluoroethoxy)-2-pyridinyl]methyl]thio]-1H-benzimidazole (9CI) (CA INDEX NAME)

CM 1

CRN 103577-40-8 CMF C16 H14 F3 N3 O S

$$\begin{array}{c|c} H \\ N \\ N \\ S - CH_2 \\ Me \\ O - CH_2 - CF_3 \\ \end{array}$$

CM 2

CRN 64-17-5 CMF C2 H6 O

 $_{\rm H_3C^-CH_2^-OH}$

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 43 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 1993:574209 CAPLUS

DOCUMENT NUMBER:

119:174209

TITLE:

Therapeutic combinations of gastrin antagonists and

ATPase inhibitors for the treatment of peptic

disorders

INVENTOR(S):

Horwell, David Christopher; Hunter, John Cureton

PATENT ASSIGNEE(S):

Warner-Lambert Co., USA

SOURCE:

PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9312817	A1	19930708	WO 1992-US10692	19921211

W: AU, CA, JP, NZ

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AU 9332475 A1 19930728 AU 1993-32475 19921211
PRIORITY APPLN. INFO.: US 1991-811487 A 19911220
WO 1992-US10692 A 19921211

AB Combinations of proton pump inhibitors and CCK-B/gastrin antagonists are effective in the treatment of peptic disorders, such as ulcers and gastroesophageal reflux disease and in the treatment of Zollinger-Ellison syndrome. Pharmacol. effects of [R-[R*, S*-(E)]]-4-[[2-[[3-(1H-indol-3-yl)-2-methyl-1-oxo-2-[[(tricyclo[3.3.1.13,7]dec-2-yloxy)carbonylamino]propylamino]-3-phenylpropylamino-4-oxo-2-butenoic acid as gastrin antagonist in combination with BY 308 as ATPase inhibitor were tested with rats.

TT 73590-58-6, Omeprazole 86604-69-5, BY 308
103949-62-8

RL: BIOL (Biological study)

(gastrointestinal disorder treatment with gastrin antagonists and)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

RN 86604-69-5 CAPLUS

CN lH-Benzimidazole, 2-[[(4-methoxy-3-methyl-2-pyridinyl)methyl]thio]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 103949-62-8 CAPLUS

CN 1H-Benzimidazole, 2-[[[3-chloro-4-(4-morpholinyl)-2-

pyridinyl]methyl]sulfinyl]-5-methoxy- (9CI) (CA INDEX NAME)

MeO
$$H$$
 N S CH_2 N $C1$ N

L5 ANSWER 44 OF 44 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1993:45769 CAPLUS

DOCUMENT NUMBER:

118:45769

TITLE:

Ingestible pharmaceutical compositions for treating

upper gastrointestinal tract distress

INVENTOR(S):

Upson, James Grigg; Russell, Carmelita Macklin Procter and Gamble Co., USA

PATENT ASSIGNEE(S):

PCT Int. Appl., 14 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIND DATE			APPLICATION NO.				DATE						
	WO 9217164			A1 19921015			WO 1992-US1981				19920313						
		W:	AT,	AU,	BB,	BG,	BR,	CA,	CH,	CS, DE	Ξ, DK,	ES,	FI,	GB,	HU	, JΡ,	KΡ,
										NO, PI							
										CI, C							GN,
			GR,	IT,	LU,	MC,	ML,	MR,	NL,	SE, Si	I, TD,	TG	-				•
	CA	2106	215			AA		1992	1005	CA	1992-	2106	215			19920	313
	CA	2106	215			C		1997	0527								
	ΑU	9217	614			A1		1992	1102	AU	1992-	1761	4			19920	313
	ΑU	6653	49			В2		1996	0104								
										EP	1992-	9106	61			19920	313
		5787															
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, GF	R, IT,	LI,	LU,	NL,	SE		
										BR							
	HU	6588	1			A2		1994	0728	HU	1993-	2970			:	19920	313
	HU	2132	03			В		1997	0328	HU							
	JΡ	0650	6682			T2		1994	0728	JP AT	1992-	5096	79			19920	313
	ΑT	1283	51			E		1995	1015	AT	1992-	91066	51			19920	313
	ES	2077	417			Т3		1995	1116	ES	1992-	91066	51		:	19920	313
	CZ	2821	05			В6		1997	0514	CZ	1993-	2260				19920	313
	RU	2126	249			C1				RU							
	US	5244	670			Α		1993	0914	US	1992-	88712	28			19920	520
	US	5629	013			•		1000			1004						
PRIOR					. :					US	1991-	6804	59	I	A :	19910	404
										WO	1992-1	US198	31	I	A :	19920	313
										US	1992-	87466	53	E	31 :	19920	427
										US US WO US US	1993-	10428	32	E	31 :	19930	811

AB A composition contains a drug useful for treating upper gastrointestinal tract distress (antacids, acid secretion prevention agents, Bi-containing drugs, and their mixts.) and an excipient comprising 3-l-menthoxypropane-1,2-diol (MPD) to provide a cooling sensation to the throat. A formulation containing

=>

CaCO3 42.87, Mg stearate 2.5, colored speckles 0.75, flavorants 0.78, MPD 0.07, N-ethyl-p-menthane-3-carboxamide 0.05, aspartame 0.198, Na saccharin 0.102%, and mannitol q.s. was compressed into chewable tablets suitable for relief of heartburn, acid indigestion, and upset stomach.

IT **73590-58-6**, Omeprazole

RL: BIOL (Biological study)

(pharmaceuticals for treatment of upper gastrointestinal distress containing)

RN 73590-58-6 CAPLUS

CN 1H-Benzimidazole, 5-methoxy-2-[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & O & Me \\ \hline N & S - CH_2 & N \\ \hline MeO & Me \\ \end{array}$$